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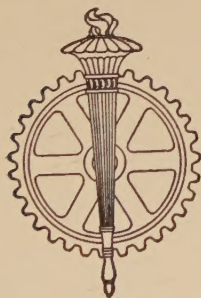
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# HIRING THE WORKER

BY

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## PREFACE

The term "employment manager" is still new in the commercial and industrial world. Any attempt to define this official's functions or to describe his methods is certain to be disappointing because of its lack of definiteness and the numerous inconsistencies and conflicting theories revealed by current practice. Because of the rapid development and constantly changing ideals of the employment management movement, it is difficult to predict even the general trend of what the next decade will regard as successful conduct of certain phases of the work. Enough has been done, however, by many progressive firms to make a summary of their efforts of value, if not as a statement of fixed principles and policies, at least by way of suggesting the possibilities and pointing out the profitable avenues of advancement.

The present volume is made possible through the willingness of busy superintendents and employment managers to participate in a co-operative attempt to study their methods and formulate a statement of the sort indicated above. Thanks are particularly due to members of the Boston Employment Managers' Association and to their secretary. Information was very gladly and courteously given, not only by firms who were members of this Association, but by other business houses visited by the writer. Appreciation is likewise due to The Vocation Bureau, of Boston, and

to Professor Paul H. Hanus, of Harvard University, for valuable assistance in many details of the investigation. Parts of several chapters first appeared in *Industrial Management* (the Engineering Magazine). The bibliography (Chapter XII) contains a list of the most important sources of information bearing upon the subject, together with all of the authorities quoted.

While "Hiring the Worker" was written primarily to assist superintendents, foremen, and employment managers to solve their employment problems, it is hoped that certain portions will prove helpful to vocational counselors, school officers, parents, and social workers who are concerned in any way with helping others to choose their occupations or to plan their careers.

ROY WILLMARTH KELLY.



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## INTRODUCTION

# THE NEW PROFESSION OF HANDLING MEN

BY MEYER BLOOMFIELD

Formerly Director of the Vocation Bureau of Boston

A NEW movement and the recognition of a new profession have developed within the past five years. The movement is known as the Employment Managers' Associations, which are to be found, either full-grown or in process of starting, from Boston to San Francisco. The new profession is that of Employment Manager or Supervisor of Personnel, and provision for such executive is to be found in a rapidly increasing number of large as well as small industrial and commercial establishments.

Both to employer and employee the significance and right development of Employment Executives' Organizations, Employment Departments, and the proper equipment and powers of employing executives, are of far-reaching importance.

Whatever may have been the genius and humane impulses of the men who have revolutionized modern methods of management, either as progressive employers, managers, or system builders and experts, the fact remains that what may be termed labor-manage-

ment, the handling of the "human problem," has received far less attention, skill, and insight than have the material factors in organization.

Had a fraction of the imagination been bestowed on problems of the working force, and on questions of constructive relationships with employees, which has been so successfully applied to material, methods, and machinery, we should have been farther along than we are today in the matter of enlightened labor-management and industrial relationship.

In the coming years—now, in fact—men more than things must engage the most thoughtful interest of employers. There can be no sound organization where questions affecting the working force are relegated to a subordinate or treated as a mere incident in business enterprise. The truth, fortunately recognized by an increasing number of important industrial leaders, is that the man-problem in organization is the really vital one. To slight it is to build on quicksands.

A little over five years ago, the Vocation Bureau of Boston, an institution devoted to the promotion of vocational opportunity, began to study in a large way the question of the human factors in industrial organization. In order to obtain material for this study, the Bureau examined first the aims of existing trade and technical societies. Not one was found which gave more than incidental and occasional consideration to the subject of personnel organization. No group of employers, or of minor executives, could be found which dealt in a systematic way with the multitude of problems arising from an interest in questions affecting employees other than as economic units.

The men who do the hiring, and watch the ebb and flow of the working force, the men who literally pump

the life-blood into an establishment, and are in a singular position to affect the complexion and quality of an organization, had no association or common intercourse whatever and were rarely members of any society or association where they could exchange experiences.

Obviously this was an undesirable situation. These hiring agents were not, of course, at fault. They reflected the average employer's conception of his personnel problems and his responsibility concerning them.

Now this condition and lack of insight expressed itself in wastes which later investigation proved to be as grave as they were preventable. At the very outset of the Vocation Bureau's inquiries, while it was examining methods of hiring and the experience of employees during employment, an effort was made to find out how many persons passed each year through the office of the employment agent. Figures were almost impossible to obtain, because either no records were kept, or records were kept in a way which meant nothing. Yet enough was discovered to reveal an enormous leakage, a waste that was costly to the employer, and obviously unfortunate for the under-employed men and women who coursed in and out of the work places.

In pressing this inquiry further, an attempt was made to find out what estimate, if any, had been made of the cost of changing employees—the actual money cost—not the cost in terms of discontent, poor organization, and unemployment. There were no figures to be had, though in a few instances interesting approximations were ventured. Guesses ranged from fifty cents to two hundred dollars. All this happened over five years ago.

The obvious thing to do in the face of the situation then disclosed was to bring together those who were closest to the processes of the waste just mentioned to see what could be devised by way of remedy. There was something more in view, however, than an association of those who would take concerted and sustained interest in the question of a stable working force, vital though this was. The whole problem of building up a sound personnel body loomed up and presented so many novel phases that a specialized society to deal with it seemed to be urgent. In addition, the handling of employees, from the stage of hiring throughout the course of employment, suggested, dimly at first, to be sure, a new career for qualified and specially trained executives.

The more the subject of personnel management was thought about, the larger and more important seemed the field and its vista of industrial statesmanship. The immediate task then was to make a start in a pioneer direction.

Five years ago the Vocation Bureau invited fifty men who were in charge of hiring and related work in fifty of the largest establishments in Greater Boston to meet for the purpose of organizing an association of employment executives. The response was all that could be desired. Although this was the first attempt ever made to bring about a professional organization in the employing field, no argument was needed to persuade anybody as to its importance. Indeed, several of the men present stated that they had for a long time felt the need of meeting regularly with others who were coping with problems such as they daily encountered. They wanted to know how others selected employees, how they got them, and how they kept them;



they wanted information as to best practices in carrying on employment departments, supervising and training personnel, and reducing the friction spots and abuses in organization and management.

The following program was adopted:

To discuss problems of employees; their training and their efficiency.

To compare experiences which shall throw light on the failures and successes in conducting the employment department.

To invite experts or other persons who have knowledge of the best methods or experiments for ascertaining the qualifications of employees, and providing for their advancement.

It will be seen that the aim of this new association was to provide a professional medium for the exchange of experiences in a field where little interchange of ideas had hitherto taken place; to study the human problem in industry. In short, there was a conscious effort to make industrial practice square with twentieth-century enlightenment.

For more than two years the monthly meetings of this association were given over to speakers on subjects of general interest to the members. There was not at that time much real discussion or interchange of opinion and experiences. One day, a member rose and said: "We have heard many good speakers from the outside. They are all right, but they do not have our problems and difficulties to face every day. We want good speakers from time to time, but we can tell one another more than anybody from the outside. Let us be the speakers, and I am willing to begin by telling you my own troubles in running our employment department, I have brought some figures to

show you what our labor turn-over is and ask you how to improve it."

The ice was broken. From that day, three years ago, to the present the meetings of the Boston Employment Managers' Association have been largely given over to papers prepared by the members, dealing with their own difficulties and successes, and the discussions, which always actively follow, have brought out a wealth of information. The members were becoming experts in their field. As men reflecting real daily problems they met and helped one another and developed a progressive point of view.

A good idea of the nature of the addresses by the members will be gained from a brief abstract of some discussions:

#### ABSTRACT OF DISCUSSION AT TWO MEETINGS

##### I

##### TESTS

Our method (said the employment man of a street-railway company) in the selection of motormen has been, briefly, personal interview. That is as far as we go in grading the mental traits of men. We are with him five or ten minutes, find out where he works, his age, his education, the different places he has been employed since he left school, what he did, why he left. He is tested in eyesight—color as well as view—also in weight. He fills out an application blank. The different parties he worked for are referred to. Social references are looked up. And these are compared with his personal statement. By this method you can get an idea as to his standing. If he is accepted, he is placed in charge of an experienced motorman. That man does the testing.

He takes him over the various lines and his tests are practical ones. He is shown how the work is done. He is shown the mechanism of the car and gradually worked up to the

full responsibility of handling the car. At first he will take the handles for a short time, where there is little to contend with—where there are no obstructions. Later, he is given the handles for the entire trip. The instructing motorman is right beside him. He will meet all the obstructions and trials that confront a motorman in his daily work. These are the real valuable tests.

When it comes to the last day or two, the motorman actually leaves the front platform altogether, and the man feels he is actually responsible. Then he is down on his own resources. While there is somebody beside him to help him, you have no real test, because he feels that the responsibility rests with somebody else.

The real test would be to have a track—a short line—especially constructed at a nominal expense and have certain obstructions all ready to drop down in front of the man as he goes along. That is a real test; in my opinion a real test. A motorman is going along when suddenly he gets three bells. The conductor may do that to test the motorman, to see how quickly he can stop his car and how he does it.

## II

### DISCHARGE

We may be peculiar in the amount of stability of our organization. Our foremen are as nearly experts as in any industry with which I have come in contact. The average time it takes to reach such a position as that of foreman is from ten to fifteen years. In that period he has instilled in him more or less of the disposition of the management in regard to discharge.

Where foremen come and go quickly this function might be dangerous to place in their hands without any strain. A few figures will show how it works out with us:

In the year 1915 we had 669 cases of absolute discharge during the year. Upwards of 16000 people are employed; the percentage is not large. Of these 669, 424 have been in the service under three months; 105 more than three and under six months. A total of 529 of the 669 had been employed less than six months: a total of 140 had been employed over two years, less than 1 per cent.

As the term of service increases the number of those dis-

charged decreases. Only 23 who have been in the service from three to five years and only 17 over five years have been discharged, which illustrates the stability of our organization.

The discharge of a man does not necessarily mean that he leaves the employ of the company. Where there are a number of rooms practically the same in character—25 or 27—a man discharged by one overseer might be taken into another department where he will give entirely satisfactory services.

When the employment department was first organized it was thought unwise to take away from our foremen the right of discharge. It was thought that a check should be placed on the foremen's action and they were accordingly instructed not to discharge or terminate the services of anyone without notifying the employment department. The employment department interviews every employee who leaves, either voluntarily or discharged for cause.

They feel that sometimes the foremen are hasty and employees are discharged when other means can be used to discipline them and thus save an experienced hand for the company. The employment department was responsible for saving eighty experienced people for the company by transferring them to other departments.

The transferring of the control of discharge from the foreman to the employment department has been very successful. Next year I think the department heads will be instructed to dismiss no one except by the consent of the works manager; he will delegate this to the employment department.

The example of the Boston association has been followed in a number of large cities throughout the country. There are flourishing societies in New York, Philadelphia, Detroit, Chicago, and elsewhere, while in a score of important industrial centers employment executives are getting together for a similar purpose.

The present indications are that a country-wide extension of such organizations will take place, because the idea underlying them appears to be fundamental, and in accord with the aims of both industry and social service.



If such extension, then, of employment executives' associations should take place, the time is opportune to consider their purposes, and their possible contribution to good management and right industrial relations. Bearing in mind the fact that the original effort for this type of association came from an institution, the Vocation Bureau, whose chief aim is the promotion of vocational opportunity, the trend in such associations should be along the line of enlightened thinking in modern industrial organization. If their growth remains true to the initial aims, such associations are in a position to help unravel the tangled problems of misemployment, under-employment and unemployment, and the waste of human capacity in general.

When everything that present-day science can suggest in the way of improving technical efficiency in systems of cost-keeping, equipment, machinery, and material has been adopted, the biggest of all industrial problems still remains to be faced.

As we have seen, this is the problem of handling men. Every awakened employer knows that managing employees, selecting, assigning, directing, supervising and developing them, is the one phase of management which is most difficult and complicated. Employers have not been unaware of the size of this task. Experiment after experiment has been tried with varying results, all of them aiming at the goal of welding the working force into a stable, dependable, and well-assimilated organization. And yet such organization is not common.

Employers, of course, appreciate more or less clearly what all this means. But few, until now, have set themselves to work on this problem as they should. Some have with unhappy results expected miracle-

workers to solve their human problem, or have toyed with strange employment schemes; while others have relied unwittingly on sleight-of-hand performances in personnel-building instead of dealing with this big problem in the way they deal with other knotty problems. If to psychology they must turn, a psychologist and educator like Prof. E. L. Thorndike of Columbia, for example, could have shown them that the application of science to the problem of handling men involved long and painstaking, not to say exceedingly laborious, investigation. There is no easy road to solving the man-problem in industry. But there are ways, intelligent, common-sense and practical ways, of setting to work. There are certain principles to be observed, methods to be adopted, and standards to be maintained in dealing with the question of personnel, and only through adhering to these will a reasonable degree of success come. At any rate the waste and friction now involved in the average treatment of the personnel problem can be materially reduced.

In the first place, the fact must be firmly grasped that handling employees is a serious business. To the employment department we must finally look for a solution; to its powers, duties, functions, and place in the scheme of organization. And above everything else we must look to the character, training, equipment, and function of the man who handles the personnel.

So at this point thought can be most profitably bestowed. A new conception is needed of the functions of the employment department, and the qualifications of the employment superintendent. Not every concern has a special employment department, although the large establishments are giving up the system of hiring by department heads, and concentrating the selec-

tion of employees into a separate division. More and more the need is recognized of functionalizing the hiring and handling of men. Without such specialized treatment of this problem it is impossible to give the matter the attention which it requires. Moreover, the power to hire and discharge extended to a number of individuals has given rise to abuses and frictions which have cost the employer dearly. Nothing is more fatal to sound organization than such power without adequate supervision and check. Petty executives should never be entrusted with this vital function. Right relations cannot be secured by such a method. Hiring men and discharging men are serious affairs. Costly experience has settled this proposition.

The quality of the working force determines in the final analysis the quality of the organization, of its product, of its success. Nowhere is this fact more evident than in the organizations which sell service; for example, department stores and public service corporations. The point of contact between the business and the customers and the channel of communication are always through the individual employee. The business is summed up as to its standards by this outpost in the person of saleswoman, telephone operator, or car conductor. Good-will is made or unmade according to the type of representative. The larger the organization, the more the units of contact. Business may be essentially impersonal, but it is highly personal in its service features. The teamster, driver, stenographer, floor manager, claim adjuster, and scores of others act in a personal sense and with individual customers.

Who selects these people? On what basis are they selected? Is it all guess-work? The business man

who has not already asked himself questions such as these will do so before long. The whole drift of the time is in the direction of greater attention to the proper selection, supervision, and development of the individual worker. Such attention is no longer a by-product of other responsibilities. It is no longer an inferior man's job.

The employment function is so important to good organization as well as right relations that the hiring office will be looked upon, as it now frequently is, as one of the vital departments of a business. Somewhere in the scheme of organization provision must be made for a well-equipped office to deal with the many problems concerning personnel. Only through such specialization can the solution be approached. In the first place, such office or department alone can deal with the task of scientifically organizing the source of supply of help. To depend on applicants at the gate, to hang out a want shingle, or to advertise through want columns or the medium of other employees, is too haphazard a method. Raw material is not procured in this way. Scientific purchasing requires a study of markets, testing out of material, and figuring of conditions. There is here no higgling and blind bargaining. The laboratory is frequently used to render the final verdict in favor of or against a certain purchase.

Why has the hiring of men been permitted to go on with less systematic scrutiny? One reason has been the surplus, the labor reserve. This will no longer avail, first, because industrial conditions and legislation are working to diminish, if not wipe out, the excess of applicants for work on the fringe of every industry; and second, because wise business management recog-

nizes the good sense of organizing the source of labor supply in connection with an organized labor market.

Source-organization assumes various forms. In the case of prospective executives, some large establishments employ "scouts" (not unlike those of major baseball leagues, who range the minor circuits for promising players), who visit periodically the colleges and other institutions and discover the men of promise. One of the leading manufacturing companies of the country is noted for its post-graduate business opportunities. Indeed, it has built its entire executive force practically out of the findings of its scouts. Another establishment recruits its rank and file from a careful canvass, a block-by-block and a house-to-house visitation of neighborhoods. One of the leading department stores in the East has made special arrangement with the high schools of its city and suburbs to send during Saturdays and vacation periods boys and girls for try-out work. They are fairly well paid during the probationary period. When they have finished their school work, positions are awaiting them, based on the observations and the records of the employment department which is charged with this duty.

A study of the source of supply, then, is one of the first interests of a properly organized employment office. Ample powers are given such offices to reach out and tap the best reservoirs. There is no reliance placed on securing a competitor's help. The aim of such offices is to develop their own material from the raw. Permanence of work is secured by the fact that fitness for the work required is carefully ascertained in advance. Discharge is not in the hands of a variety of sub-bosses. Whim and prejudice are eliminated. The employment office aims to secure employees who



will find it worth while to stay, and who know that higher positions will be filled by promotions.

As one studies the application cards of various concerns one reason for maladjustment becomes clear. So little analysis of the work required has been undertaken that we have practically no specifications, no *blueprints* of job-requirements in order to enable an applicant to measure himself against the actual demands. Hit-or-miss is the prevailing method. The hiring office properly managed knows that a well-devised application and record blank is one of its first tasks.

Some time ago the application blanks of fifty corporations were collected. If one cut off the firm names, there would be difficulty in identifying from the material the nature of the business it pertained to. The blanks showed little understanding of the specific requirements of the various occupations. There was little differentiation in the questions asked. Employees cannot be properly selected or adjusted on such a basis. Each establishment must work out its own needs and demands and record them in the hiring blank.

In brief, to one who observes the current practice of hiring, handling and discharging employees, the conclusion comes home with peculiar force that in no other phase of management are there so much unintelligence, recklessness of cost, and lack of imagination. On the other hand, in the right organization of the employment scheme there would seem to be endless possibilities of genuine service, a service not possible even in the most benevolent of welfare projects.

The situation on the whole suggests the need of recognizing a new profession in the organization of industry—the profession of hiring and developing men.

Executives will have to be trained for this work as they are trained for other important responsibilities. The employment manager, the executive within whose duties falls the direction of the personnel, must be prepared for this work as for a genuine profession. The handling of men in this century will call for unusual preparation in the way of understanding and a spirit of justice.

To seek a professional basis for the work of handling men, and a definite training course of preparation, is not a novel suggestion when one considers how many other functions in business have been brought under such direction. All schools of business training, engineering schools, indeed professional schools in general, have had to do pioneer work in applying science and organized experience to familiar pursuits such as accounting, salesmanship, banking, railroad practice, and management. The Tuck School at Dartmouth College, and the Wharton School at the University of Pennsylvania, to name two examples of forward-looking institutions of business training, have been simply true to the original motive of their creation when they undertook to organize employment courses as subjects for instruction.

Though a long period of time may be needed before such courses contain standard material, they are in a good position now to gather the best available material, analyze the best practice, and systematize the thinking and research into the problem. Meantime the management world is laid under obligation to these institutions for their pioneering foresight and their placing themselves in a position to make contributions to what many now regard as the most important phase of management.

So in the growth of employment-management societies and in the growing connection between them and management training courses, both employer and employee will find valuable assistance in overcoming waste, while in the development of the new profession of handling men and all that this idea implies in the way of new relationships between management and men, there are unique opportunities ahead for co-operation between the forces that make industry possible.

## CHAPTER I

### THE AIMS AND THE DEVELOPMENT OF EMPLOYMENT DEPARTMENTS

**I**T is characteristic of our scientific age with its remarkable progress along mechanical lines, that far more attention has been given to improving methods which are related to machinery, processes, systems of accounting, and means of transportation, than to the problems of personality which center about the employee. While the leaders of the "scientific management" movement undoubtedly had in mind the necessity for a careful selection of workers and the consideration of the welfare of every individual in the organization, their time during the early progress of the movement was so fully occupied with other matters that these phases were as a rule entirely overlooked, or at least sadly neglected, in the shops where their ideas have been introduced. In the nature of the case, such a condition could not long prevail. It very early became evident that exact methods could not be carried out successfully in a factory where the personnel was chosen at haphazard or was constantly changing. An organization which formulates for itself certain well-defined aims and looks forward to a continuous growth in the perfection of these aims, is forced to make careful choice of its agents and to insist

upon their retention in service in order to secure continuity of output and policy.

The statement of the lack of a proper solution for the problem of handling employees does not imply that executives have not fully realized its difficulties. Hundreds of costly experiments have been tried in order to assure the laborer of just treatment and fair wages, to secure a dependable and stable working force, and to diminish the tremendous waste due to the constant flow of workers from one firm to another.

Only within the past half dozen years has any generally adopted plan for treating the problem appeared. During 1912 the first organization in the United States for the purpose of discussing the questions related to employment was formed in Boston on the invitation of the Vocation Bureau. At that time only a few of the firms represented had separate departments for hiring, training, and promoting the welfare of their employees. A decade ago a few firms scattered over the country had such departments, but the number was small indeed. A striking change has taken place within the past few years. Several other organizations patterned after the Employment Managers' Association of Boston have been started in other cities throughout the United States, and the number of firms employing executives of this sort has increased with great rapidity.

It was in the hope of furnishing more complete data on the actual methods in use that the present investigation was undertaken. While an extensive statistical study of the results accomplished by newer methods, in comparison with those widely employed a few years ago (and still extensively practiced), would no doubt have proved very helpful, it was felt that at the pres-



ent time a greater service could be rendered by more general statements as to practices and policies and by broader generalizations as to accomplishments.

The literature of the subject is still very meagre. Scarcely a half-dozen accounts of employment departments are in print, and employment executives everywhere feel that their work is still largely experimental. Concerns that have inaugurated separate departments are anxious to exchange experiences with other similar departments, and executives who are contemplating changes want to know more about the general practices in vogue. Furthermore, the diversity of practice in collecting statistics and the complete lack of data in many instances would make it very difficult to formulate authoritative statements. Standards must still be decided upon for the compilation of vital facts. It is useless, for example, to say very much about the cost of the turnover when no two executives agree as to the method of computing the exact amount of the turnover itself.

With these considerations in mind, an investigation was undertaken by the writer during the Spring and Summer of 1916, which was carried on by the usual questionnaire method supplemented by personal visits. Thirty-one replies to the questionnaire were received from employment managers, superintendents, and others and visits were made to thirty-four different concerns. Fairly complete data were secured in this way concerning the employment methods in use in thirty firms, representing a total of about 55850 employees. The greater part of the discussion which follows is drawn from the returns from eighteen of these firms that had established separate employment departments.

The importance which has lately attached to this question is well illustrated by the fact that several of the firms which replied to the questionnaire (see page 27 *et seq.*) have recently established departments only after careful investigation of what was being done by other companies. One firm sent several members of its staff on an investigation which took them into a number of States and during the progress of which they visited and reported upon fifteen different employment departments. Copies of a summary of the methods found in use in these departments were submitted to some two hundred of the firm's most trusted employees with requests for criticisms and suggestions. On the basis of the returns, plans were drawn up for a complete reorganization of the employment department and these plans are now being put into effect.

Only a few of the firms reporting have had their employment departments in operation for more than five or six years. One of the most complete departments has been carrying on its work for about sixteen years, although many of its best features are of more recent origin. Two other excellent departments were organized in 1908. Several commenced work in 1914 or 1915.

Various reasons are given for the establishment of a separate department. One began with the mere keeping of employees' records so that some satisfactory data might be available concerning each employee. Another states that the management realized that its policies with respect to the treatment of employees were not being adhered to by its executives, and these duties were later given over to the employment manager.

In other statements the following aims are to be

found: To fill the need for a centralized department for employing workers and maintaining employees' well being; to reduce labor turnover; to get the best possible help; to overcome unsatisfactory conditions resulting from a division of responsibility among three superintendents.

The following is one of the most complete statements:

The necessity of not only proper selection, but follow-up by someone directly responsible and specially trained, was early recognized, and the work was done by the manager himself until the Service and Welfare Department was developed to handle employment as a basic part of its function. The immediate interests of anyone responsible to any degree for operating are bound to be in constant conflict with the ultimate objects and policies of the employment department. From time to time questions arise between employees and heads of operating departments and no one who is a party to these questions is in a position fairly to decide and solve them. The solution of such questions is a function of the employment department and they would be impossible of fair and satisfactory solution if the function of employment were administered by one who might be an interested party. Where, moreover, enough people are employed to make employment a real problem, it is a problem as important as operating itself, and requiring as much, if not more, ability; and there is no reason why it should not be administered by one who is just as capable and has as much ability in his line as a head of an operating department.

Another employment manager writes:

The growing need for the specialization of employment methods and the hiring of help, together with the realization that the foreman's and superintendent's time should be devoted more exclusively to production, caused the management to decide to organize an employment department. The writer was engaged as manager of this department in August, 1913.

The first step taken was the installation of various forms for requisitioning help, application cards, leaving forms showing the man's ability and reasons for leaving. The establishment of a new department is usually looked upon with suspicion by foremen in any industry, and so it was with our department. There were many misunderstandings, such as overlapping of authority, which had to be straightened out and explained.

The next step was the formation of more up-to-date application forms and the keeping of the individual efficiency record, also daily record of all men hired and fired, from which we work out our labor turnover. We are now working on a form which will give us the turnover by departments, together with statistics showing the average age of employees, number of married and single men, and number of different nationalities employed.

The Director of the Boston Employment Office of the Employers' Association of Massachusetts represents a number of concerns who look to him to supply a considerable proportion of their help. He says in regard to the inauguration of this service:

The members of our Association realized that the matter of securing help was a problem which required the attention of some one person in their organization who would always have the necessary time to interview a large number of applicants when they were compelled to advertise. They decided to install and operate an employment department where they could secure their help, and where it would not be necessary for the man seeking a position to pay any part of his wages for securing such a position. We do not subject an applicant to any unnecessary questions, but we do maintain that the several members of our Association shall have the right of saying whom they shall employ and under what conditions.

This office keeps a file of applicants and receives from the members of the Association written specifications of the sort of help desired and the kind of work to be performed.

A large department store gives this interesting history of the development of its employment work:

In the original Filene store on Washington Street all employment work was done directly by a member of the firm, who had, of course, many other responsibilities including those of the present position of store manager. His secretary assisted in the employment work in connection with other secretarial duties.

When the large Washington Street store was taken the employment work was carried on still by a member of the firm. An assistant, however, was appointed to devote all her time to employment, education, welfare, and some executive work. A year later a clerk was engaged, working directly under the supervision of the member of the firm and the assistant mentioned above. His duties were to engage all the minor help, to obtain references for all employees and to assist in other employment work. He devoted all of his time to employment duties but had no executive functions.

At the opening of the new store a superintendent had been appointed, and gradually he took over all executive work connected with the handling of employees, such as discharge, etc., taking all those functions entirely away from the so-called employees' or employment office.

This organization continued until the second store on Washington Street was opened. Then the president of the corporation gave up employment work altogether. Four new members were added to the firm, one of whom was called store manager, assuming all of the former duties of the president. The president's assistant from now on devoted all her time to welfare and educational work and a new position was created—that of employment manager. The incumbent was responsible for filling all positions and had executive control to the extent of making transfers, promotions, etc. He did not have power to discharge, or any other executive functions, these remaining in control of a line organization. The employment clerk was continued and his responsibilities consisted still in engaging all minor help.

The employment manager was next given more executive authority and was made superintendent of employees. He had charge of the employment work for all divisions of the store, but his duties as superintendent of employees were confined almost entirely to the store manager's department.



This arrangement led to a great deal of confusion, as there was no clear line of distinction between the duties of the various positions and departments. Consequently in this store the present organization was created. The employment department now has nearly complete control of hiring, discharge, transfer, pay (method and amount), working conditions, and judging the efficiency of individuals, and it co-operates in the work of education.

## CHAPTER II

### AN INVESTIGATION OF EMPLOYMENT PROBLEMS

THE list of questions which were made the basis of the inquiry referred to in Chapter I, page 20, is to be found on page 27. In order to insure that the questionnaire would receive proper consideration, personal visits were made in practically every case to those who were requested to fill it out. These visits served the further purpose of giving a concrete basis for the interpretation of the answers. In many instances, several hours were spent with the employment manager or superintendent in inspecting the factory and talking over his methods. Valuable information was gathered in this way which served to supplement deficient returns or to interpret brief or ambiguous answers.

During the progress of the investigation, visits were made to thirty-four different concerns, and also to the central employment office of the Employers' Association of Massachusetts. In addition to the questionnaires distributed to these firms, eight were sent out by mail with explanatory letters, and four were handed to employment managers at meetings of the Boston Employment Managers' Association with a personal request for information. From the forty-six ques-

tionnaires thus sent out, thirty-one replies were received, thirty of which have been tabulated on the chart inserted facing page 32. Twenty-seven of the firms whose returns appear on the chart were visited by the writer in person, and the other three sent in very full descriptions of their employment departments.

More or less complete information was secured from seven other concerns, but this information has not been tabulated. In some cases these firms were visited in order to look up some special feature of their employment work, such as education of employees, and in others the peculiar methods in use made it impracticable to compare their work with the other departments listed.

The thirty firms on the chart employed on the average 55 850 persons, while the seven additional firms referred to employed approximately 10 500 more. The inquiry is thus representative of thirty-seven firms employing about 66 000 employees. One questionnaire, dealing largely with the general functions of employment management, was received from the employment office of the Employment Managers' Association of Massachusetts, but the reply is not considered in the above figures, although the opinions stated have been given weight in other parts of this discussion.

In location, the firms listed on the chart are distributed among thirteen cities, all but two being in New England and nearly half in Boston, as shown by the table following:

Boston, Mass.....	14	Watertown, Mass.....	1
Cambridge, Mass.....	4	West Lynn, Mass.....	1
Beverly, Mass.....	1	Worcester, Mass.....	2

East Walpole, Mass...	1	Cleveland, Ohio.....	1
Framingham, Mass...	1	Philadelphia, Pa.....	1
Greenfield, Mass.....	1	South Manchester,	
Wakefield, Mass.....	1	Conn.....	1

Of the seven other firms visited for the immediate purposes of this study, six were located in Boston and one in Cambridge. The work of numerous other departments is referred to in various places, but the names of the departments listed on the chart are withheld by special request of a number of those who were interviewed.

The complete text of the questionnaire follows:

Name of Firm.....  
 Address .....  
 Business .....  
 No. of Employees.....

INQUIRY BY THE VOCATION BUREAU OF BOSTON  
 INTO THE  
 PROBLEMS CONNECTED WITH THE WORK OF EMPLOYMENT  
 MANAGERS AND EMPLOYMENT DEPARTMENTS

(Data treated in strict confidence. Conclusions of this report will be available to all employment executives who co-operate.)

I. THE EMPLOYMENT DEPARTMENT

1. Is there a special employment department?
2. Who has charge of this department?
3. How was this department developed?  
 (Brief history of its development.)
4. What is the total annual expense of carrying it on?
5. State the items of the above expense.
6. What changes are contemplated in developing this department?

## II. THE EMPLOYMENT MANAGER

1. Who does the actual hiring?
2. How long has this official been in this work?
3. What previous positions has he held?
4. What duties and responsibilities does he have?
5. What are his relations to:
  - (a) Owners
  - (b) Superintendents
  - (c) Foremen
  - (d) Department Heads
  - (e) Any other important executive officers
6. What assistants are provided? their duties?
7. What training, experience, and personal qualities should an employment manager possess?

## III. THE WORKING FORCE

1. What methods are you using for securing employees?
2. Supply whatever data you can as to the relative merits and defects of each method.
3. What is the relative cost of each method?
4. What questions do applicants answer other than those on your application blank?
5. How do you ascertain whether an applicant has specified knowledge as to the job applied for?
6. Upon what basis is assignment to a task made?
7. What follow-up system is there by which the employment department keeps in touch with employees and their tasks?
8. What would be the ideal follow-up method from the employment manager's viewpoint?

## IV. PROMOTION

1. How are the new employees initiated into their tasks and by whom?
2. What, if any, promotion scheme have you?
3. Are the opportunities for advancement made known? How?
4. Are the tasks analyzed and recorded?
5. What methods are used to determine and rate the efficiency of employees?
6. What is made the basis for promotion?
7. What are the estimated chances for advancement in each department?



- (a) How rapid the rate of promotion?
- 8. What provision is there for transfer and try-out of employees to other work in the establishment?
- 9. How are the various grades of executive and supervisory positions filled?

## V. DISCHARGE

- 1. What are the various causes for discharge from different positions and from different departments?
- 2. Enumerate the officials who may discharge?
- 3. What investigation, if any, is made as to causes of discharge?
  - (a) As to voluntary leaving?
- 4. What are the employment manager's functions in relation to discharge?
- 5. What control, in your opinion, of discipline and discharge by the employment manager is advisable?
- 6. What experiments, if any, have been tried to lessen:
  - (a) discharge?
  - (b) voluntary leaving?
  - (c) lay-offs?

## VI. TURNOVER

- 1. What is the estimated cost of changing employees?
  - (Estimate by departments if convenient and state the items in the expense.)
- 2. How is the permanency of employment in your establishment promoted?
- 3. What has been the effect on the turnover through:
  - (a) Investigation of discharge and leaving?
  - (b) Organization of an employment department?
  - (c) Industrial and social service?
  - (d) Bonus system?
  - (e) Premiums?
  - (f) Pensions?

## VII. CONSTRUCTIVE SUGGESTIONS

- (a) What policies would you suggest for a model employment department?
- (b) What should be the duties and powers of an employment manager in such organization?

NOTE: Collect specimens of all printed material in use.

For the sake of comparison, the thirty firms have been placed in two groups. Group No. I (No. 1 to 12 inclusive) contains twelve concerns without separate departments for the control of employment problems, while Group No. II (No. 13 to 30 inclusive) lists eighteen concerns that have adopted this plan of carrying on their work.

In column 1 of the chart the numbers of the replies to the questionnaire are given and the several firms will be referred to by these numbers. The number of employees given in column 2 is the average number employed by the concern. In a few cases, such as confectioners, where the variation in the number employed was very large, the figure given is the average for the busy season, since this number more adequately represents the size of the firm's employment problem.

The heading "Official Who Hires" (column 4) indicates that the officer named has actual charge of employing help. Where superintendents or employment managers delegate this work in any considerable extent to others, it is indicated by the titles of those who do the real work of hiring.

Columns 6, 7, 8, and 9, "Method of Securing Employees," give in brief form the more important means used to get in touch with prospective employees. The terms "first source," "second source," etc., serve to show the relative numbers secured by the firm through the channel named at the head of the column.

Only a few concerns gave any estimate of the cost of the turnover, and those who did stated that the amount varied greatly in different departments and under different circumstances.

The percentages given in the "Summary of Columns" are based upon the number in each group, twelve for Group I and eighteen for Group II. A comparison of the figures for the two groups shows at once a number of startling differences between the methods in use under the two kinds of management. Only four managers in Group II used no application form to be filled out by prospective employees, and two of these kept a record which took the place of the usual blank. Among the firms in Group I, application blanks were the exception rather than the rule. A similar contrast is to be found in column 13. Seven employment managers were using some form of physical examination as an aid to selection, but not one of the twelve firms in Group I asked for such an examination.

Differences of even greater consequence are brought to light in columns 11, 12, 14, 17, 18, 21, and 22. Seven firms in Group I (58.3 per cent), as opposed to seventeen in Group II (94.5 per cent), claimed that every promising applicant was given an adequate personal interview with some authority above the foreman or department head. Only 8.3 per cent of the firms in Group I followed up references in the majority of cases, while this policy was practiced by two-thirds of the concerns in Group II. Nine firms in Group I (75 per cent) depended largely upon trial at work to determine the individual's fitness. While it must be taken for granted that this is to be the final test in every case, it ought not to be the first and only test. The small

number in Group II who emphasized this as an important means of judging fitness accompanied it with other grounds for judgment. Only two superintendents in Group I made a point of informing their employees of the opportunities for advancement, and two were definitely opposed to the policy. On the other hand, nearly three-fourths of the employment managers in Group II had made careful provision for instructing each employee concerning the chances for advancement in his department.

Only one firm in Group I had attempted any form of job analysis, while this important matter had been at least begun by 77.7 per cent of the firms in Group II. One of the most striking differences is exhibited by columns 21 and 22. The investigation of cases of discharge and the reasons for voluntary leaving is one of the comparatively simple yet highly important means of discovering cures for a large turnover. The relatively slight importance attached to this question by the firms in Group I is shown by the large number who fail to make any investigation whatever either of discharge or of voluntary leaving.

This summary shows conclusively that without a highly organized employment department there is little probability that a firm can successfully develop the sources for new employees, properly select from the applicants offered, or effectively promote and educate its working force.









### CHAPTER III

#### DUTIES AND RESPONSIBILITIES OF THE EMPLOYMENT MANAGER

**I**N the nature of the case it was not to be expected that very much uniformity would exist in the types of organization selected for employment departments or in the powers delegated to the executives in charge. The size of the firm, the character of its business, and the local labor situation are among the causes that are certain to contribute to a diversity of practice. There are, however, a number of essential features common to all such departments. A statement of these points, together with such individual characteristics as seem noteworthy, is presented in the form of a summary of the eighteen representative firms that were selected, in the hope that it will provide some general impressions of the work being done.

The first important function of this department is that which centers in the selection of employees. Familiarity must be gained with the requirements of the firm and with the various sources which can be drawn upon for workers of various grades. These sources must be carefully analyzed and the most reliable and productive must be developed. New channels will be opened by contact with schools and colleges and through special representatives to other cen-

ters if necessary. All advertising for help is controlled by this department. Every applicant is interviewed by the manager himself, or by an assistant, and subjected to whatever tests or examinations are deemed necessary. Records are kept, not only of all persons employed, but of all who apply who are thought worthy of future consideration. References are followed up and in some cases visits are paid to the homes of prospective employees.

A second equally valuable function is the follow up of employees. Several concerns have analyzed and recorded the tasks and have adopted uniform systems of efficiency-rating for each different kind of work. Regardless of what the method of record keeping may be, it is usually the aim of the employment manager to keep in close personal touch with his men. This ideal of intimate relationship is held by several superintendents who care for their own employment affairs, but only two out of the dozen or more of this class who were visited seemed to be actually putting it into practice. Other problems fill his mind too completely for the average superintendent to give sufficient attention to a personal study of his employees.

Arranging for promotions or increase in pay, transfer to other departments or to different kinds of work, and discipline, are matters which may come under the employment manager's jurisdiction. Complete power to determine the rates of pay is not often granted, but the employment manager is frequently given the right to determine beginning wage and rate of increase. In a few cases he has been given full authority over discharge. In others, he must depend upon the recommendations of foremen and heads of departments. The functions of hiring and discharge have been so





Examining Applicants at the Clothcraft Shops, Joseph & Feiss Company, Cleveland, Ohio



long in the hands of minor officials that they are usually given up with much reluctance. It has been especially difficult to centralize the power of discharge. Nearly all foremen, and many superintendents, feel that it is likely to be demoralizing to the discipline of the factory to remove the power of immediate and summary discharge from the department heads. Objection is frequently heard to transfer and try-out at other work on the same grounds. Employment executives usually claim on the other hand that foremen tend in many ways to abuse the power of discharge, that any tendency to laxity of discipline will not occur where rigid investigation of complaints is made by the employment department, and that a great gain is made in saving trained employees to the company by placing them at work for which they are better fitted or in positions where they are more contented. Where the employment manager does not have the right to discharge, he is expected to discover the reasons for each case of discharge or voluntary leaving.

Under this department may come the training of apprentices and new workers. In one firm a separate department co-operating with the employment manager has charge of all matters pertaining to education, but this does not seem to be a generally adopted type of organization.

The employment department will naturally be called upon to attend to all matters relative to the enforcement of state or Federal laws concerning the occupation of minors or women.

A function of much significance is the analysis of the turnover. An unusual turnover in any department will be a danger signal calling for immediate investigation. Has the right type of person been placed

there? Is the foreman's personality to blame? Are the working conditions bad? These and a dozen other questions will be called to the employment manager's mind at once, and if he is a real executive and has the faith of the management behind him, he will do his best to see that conditions are changed.

Among other duties occasionally given to this department are arranging for the housing of employees, caring for health and sanitation, providing recreation, libraries, and lunch rooms, and acting as a general information bureau. Highly satisfactory results may be secured through co-operation between this department and the division of safety, particularly in the distribution of literature and in the training of new employees. The compilation of various statistics relating to labor costs and the conducting of special investigation: such as wage studies are frequently parts of the work. In one firm, the employment manager assists the superintendent in the study of factory methods, serving in much the same capacity as an efficiency engineer.

In another factory, the employment department has accomplished a great deal toward reducing absence and tardiness. No foreman allows "anyone to work who is in the slightest degree dissatisfied, or who has the simplest kind of injury, or who is not feeling perfectly well, or who is likely to be in any degree physically or mentally unfit without calling it to the immediate attention of the employment department." Through this and various other methods in use, particularly by constantly instructing employees in the performance of new operations, this factory has reduced tardiness to a negligible quantity and "the absentees of many days amount to less than 1 per cent of the working force of about 800."

A concrete example of the duties of the head of this department is furnished by the following outline from one of the firms visited:

# OUTLINE OF INSTRUCTIONS TO THE EMPLOYMENT DEPARTMENT IN A PAPER MILL

1. Office is open 8:00 A. M.—9:00 A. M.  
1:30 P. M.—2:00 P. M.  
5:00 P. M.—5:30 P. M.
2. Department Head shall be especially responsible for:
  - (a) Employment of all help.
  - (b) Accurate record of each employee, showing dates of employment, transfers, promotions, when dropped, and department and performance.
  - (c) Interviewing all applicants and sending the best to superintendents and foremen on approval.
  - (d) Keeping in touch with good men not now available, or particularly needed.
  - (e) Following up accidents, promotions, transfers, and all other conditions affecting employees.
  - (f) Aid every employee in advancement. Recommendations for understudy.
  - (g) Dissemination of proper information among employees concerning all activities. (Internal publicity.)
3. Obtain from superintendents and foremen general and specific reports on employees. Also at stated intervals (see inspection routine below) hold conference on subjects with them. By these means, lists should be made of men who deserve advancement, men who should be transferred, men who are drinkers (graded), men who are unfit. Reports of men in outside mills every 6 months.
4. Aid in adjusting differences. See that any dissatisfaction is brought to the attention of the Manager.
5. Maintain list of all positions showing qualifications for each and types of worker best suited for same.
6. Inspect daily from 9:00 A. M. to 12:00 A. M.
 

Monday and Thursday	Main Mill and Finishing
Tuesday and Friday	Building and Roofing
Wednesday and Saturday	Box Shops

During these inspections he shall

- (a) Hold conferences as in paragraph 3.
  - (b) Look for all possible corrections or improvements in existing conditions, such as
    1. Brigade and Club room.  
Pictures, Magazines, Details of order and cleanliness
    2. Toilet room condition
    3. Drinking fountains
    4. Safety, sanitation, ventilation, light, etc.
    5. Steam and water leaks
    6. Any disorder which should be corrected inside and outside
    7. Work of emergency crew
    8. All club and social committee activities
    9. Recreation facilities
    10. Follow up on all activities going on
    11. Grounds.
7. Following each inspection he will make out report in duplicate for each Division.

## CHAPTER IV

### SYSTEMS OF ORGANIZATION AND THE COST OF MAINTENANCE

**I**N many establishments, the employment department has come to be a separate, highly organized division. Its head is frequently responsible only to the highest executive authority and has under his immediate control a staff of assistants, clerks and stenographers.

Question 5, Part II of the questionnaire (page 28), "What are his relations to: (a) Owners, (b) Superintendents, (c) Foremen, (d) Department Heads, (e) Any other important executive heads," was asked in order to discover what forms of organization were being used for this department.

The following responses are characteristic of the group under consideration and will serve to indicate the general trend of practice.

No. 13. Hiring power is vested in the Employment Bureau with the approval and assistance of the Administration. No foreman is allowed to hire; but he is usually allowed to express his opinion on an applicant and his co-operation is sought. We try to have foremen feel that we need and request their opinion and help in hiring. There is practically no friction.

No. 15. The work of the employment department is conducted just as though the general manager himself were run-



ning the department. The policies of the department have his backing and it is a part of the responsibility of the employment department to have policies originated and developed that will not only conserve the interests of employees but that will also receive the support of foremen and department heads so that they will loyally carry out such policies.

- No. 21. (a) Owners. Subordinate  
 (b) Superintendents. Superior  
 (c) Foreman. Superior  
 (d) Department Heads. Associate  
 (e) Any other important executive officers. Advisory capacity
- No. 22. (a) Owners. None  
 (b) Superintendents. The employment manager confers with the superintendent in charge of production and the superintendent in charge of quality. He is directly responsible to the factory manager.  
 (c) Foreman. He has authority over foremen in all matters pertaining to employees.  
 (d) Department Heads. Same as (c) above.

No. 23. The chart given below will serve to explain the plan of organization. The employment manager does all the hiring. Superintendents and foremen have control of discharge subject to investigation by the employment department.

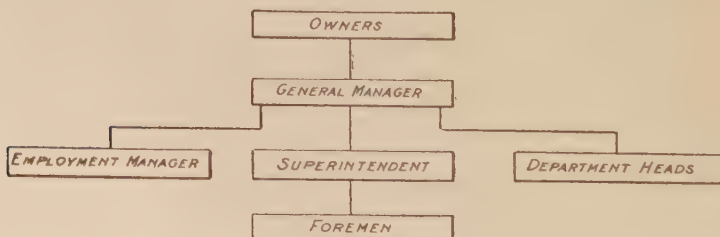


CHART 1. EMPLOYMENT MANAGER'S PLACE IN THE PLAN OF ORGANIZATION

No. 24. The employment department carries on its necessary functions with the requisite authority, but also with due regard for the necessities and work of the other departments in as harmonious a manner as possible. If any difficulties arose which could not be reconciled with these people, the appeal would be made directly to the general manager. This is a case, however, which rarely occurs.

No. 25. (a) Owners. None. The employment manager deals directly with the manager and the superintendent.

(b) Superintendents. He is directly responsible to the superintendent.

(c) Foremen. Through records. The sub-time-keeper, or foreman's clerk, reports direct to the employment manager.

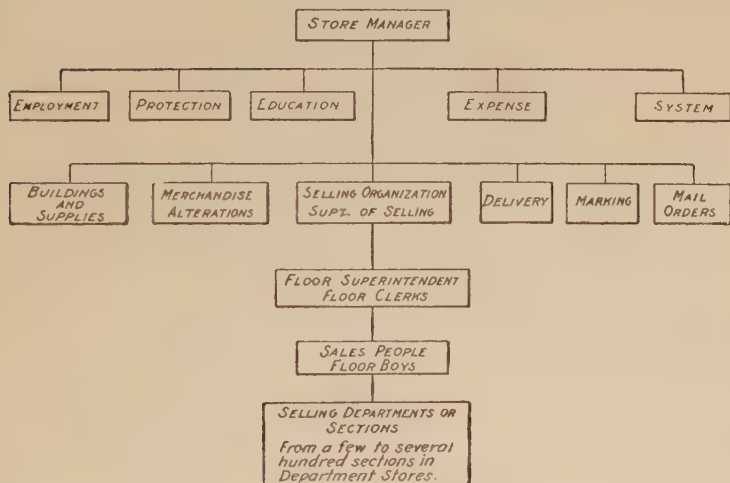


CHART II. PLAN OF ORGANIZATION IN A DEPARTMENT STORE

(From "Business Employments," by Frederick J. Allen. Ginn & Co., 1916. Copyright by the Vocation Bureau, Boston.)

No. 26. (a) Owners. Report direct to owners.

(b) Superintendents. Advisory.

(c) Foremen. Consult in matters of wages, transfers, hiring, etc.

(d) Department Heads. Advisory.

Charts II and III exemplify the type of organization demanded by the principles outlined in Mr. Bloomfield's introduction and in Chapter III. Immediate contact with the chief executive is essential if the employment department is to secure and maintain a proper co-operation among other departments, and at the same time keep open those channels, too often closed, which lead from the work bench to the superintendent's desk. Many of the department's most important powers are likely to atrophy unless there is the possibility of immediate action and decision from an ultimate authority as is suggested in the reply of No. 24 quoted above.

#### THE EXPENSE OF MAINTAINING AN EMPLOYMENT DEPARTMENT

The largest single item in the expense account of such a department is usually the salary of the official in charge of it. The size of the other items will depend

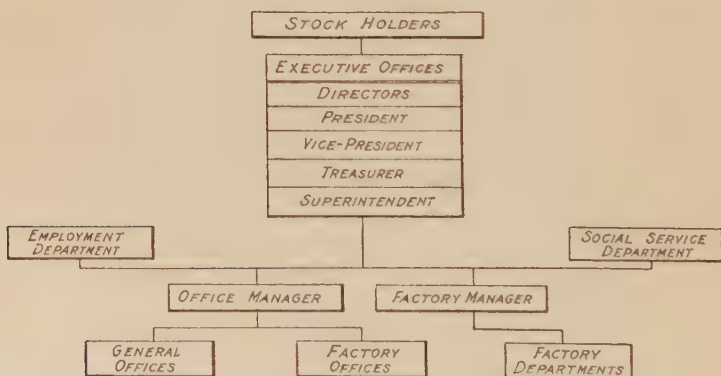


CHART III. THE PLACE OF THE EMPLOYMENT DEPARTMENT IN A  
BUSINESS ORGANIZATION

largely upon how broad the powers are which the department is called upon to exercise. Where much instruction is given, or where medical inspection is practiced, or extensive welfare work attempted, the expense is necessarily large. The following examples will serve to illustrate the wide diversity existing in representative departments. Numbers refer to the chart facing page 32 on which the returns from thirty firms are tabulated.

No. 14, a publishing house, pays its manager \$3600 and places the annual expense at \$8400. No. 15, a manufacturing concern employing 2300 people, maintains its department for \$3600 annually. The only items mentioned are the salaries of a manager and one clerk and stationery. No. 17 has a working force of 750 and renders much welfare and educational service. The expense is estimated at \$3000, exclusive of the nurse's salary. No. 18, a large department store, expended over \$14 000 on the employment department during 1915. The principal items were salaries, advertisements for help, car fares, traveling expense, telephone, and supplies. No. 19 gives an annual expense of \$10 000 without an itemized account. No. 20 reports an annual expense of approximately \$7000 expended for manager's salary, hire of assistants, stationery, advertising, traveling expense, garage and automobile expense. No. 25 estimates the expense of the employment office at about \$800 in addition to the work performed by the employment manager on labor costs and pay roll. No. 26 classifies an annual expense of \$3250 as follows: Salaries, \$2750; general expense, \$200; advertising, \$300.

One employment manager made the following statement;

The expense of this department is not carried in such a way as to make it possible to separate it entirely from other functions. Our organization here is such that the original employment, following up, training, looking after safety matters and even the supervision of our general correspondence, is all brought together under one department and the figures are quite decidedly intertwined of necessity.

The fact that a considerable number of departments report so small an expense account would point to the conclusion that there are too many firms who still regard the employment department as of minor significance. They are too willing to place at its head salaried clerks rather than highly paid executives. The conditions must not be overlooked, in making such a general statement, that in many small concerns this department is closely under the control of the general superintendent, and in some cases, where the department has recently been organized, it has been placed in charge of a man selected from outside the organization, and increase in salary, as well as other items of expense, is to be expected as the department proves its worth.

In general, the items charged to this department will be: Salary of manager; hire of assistants, clerks, and stenographers; stationery; advertising; traveling expenses both of department and of applicants under certain conditions; heat, light, etc. What overhead charges will be made will be determined by the type of organization, but these should be small.



## CHAPTER V

### ANALYZING THE JOB

**M**ANAGEMENT experts have familiarized us with methods of analyzing, planning, and routing work. They have standardized many a job. Usually such standardization has been worked out in connection with production, where objective units could be determined with a fair degree of ease and success.

When we come to fields of work involving more personal elements than does, say, machine work, the problem of standardizing the job is much more difficult. Time units and production units do not tell the whole story, nor by themselves afford all the possible or necessary criteria for defining a task.

While it is true that in retail selling, to take a familiar illustration, the final success of the salesperson is measured by the individual volume of sales, the description of and the specifications for a selling position can never be adequately stated in terms of goods sold alone. To do so is to miss certain basic principles which go to make selling success, and to confuse the salesperson whose efficiency is necessarily a composite of both personal and impersonal elements brought into skillful play throughout the process of selling.

There are numerous positions in the industrial and commercial world which are similar to salesmanship

in their union of personal and impersonal factors. Unless the analysis of such positions and their processes takes both phases into account, it will result in specifications that appear to be good from the mechanical point of view, but in practice are rather meaningless and often unworkable.

Every merchant has come to realize this fact, and the problem of laying down and charting a scheme of tasks in which personal factors function is of general interest.

The following is an account of an original method, the outgrowth of wide experience with employment projects, intended to bring to every employee of a large establishment a vivid sense of the work to be done and the incentives for carrying on that work successfully.

The plan was devised by Mr. Meyer Bloomfield of the Vocation Bureau of Boston, when invited by the firm of Bamberger and Company of Newark, N. J., to organize their personnel work. The store employs about twenty-five hundred persons and is noted for its modern methods.

Two problems were before the management in considering how to establish a more effective scheme of relationship between the executives and the working force. (Let it be said at the outset that wise dealing between management and workers for a long period of years has solved the problem of good-will throughout the establishment. The aim of the present undertaking was to go further in cementing team play throughout the organization.)

The first problem was how to obtain a fair, working description of every task performed in the store, from the top executive down; the second, how to make

the result a source of stimulus, fair dealing, and good work.

The usual way of solving such a problem as the first would have been to get some one to study each task or operation and draw up specifications for it. As has been already suggested, such a method might well have proved futile, and deservedly so, because of its too mechanical and impersonal character. In a large retail store there are a number of good salespersons who, in their daily practice, embody all the essential principles of success in their vocation. To fail to profit by what they do and know, and can be helped to contribute in a statement of their duties, is to do violence to common sense and elementary psychology.

The first method, then, adopted in the Bamberger study was to give each employee a list of questions to answer about his routine duties, his problems and experiences, together with a request for suggestions and criticisms. An explanation of the purpose of the study was made beforehand in order to enlist the co-operation of the people. What was especially emphasized in laying the project open was the desire to define fairly what the work of each actually was, and in so doing to provide a clearer basis for fair dealing, good service, and just compensation.

The employees were thus encouraged to "think on the jobs," a fundamental principle, according to Mr. Bloomfield, in all attempts at right relations and good service, particularly service which brings employee and public in daily contact. Now, "thinking on the job" cannot be obtained by demanding it. Conditions for its encouragement must be provided. The method followed in the Bamberger study was aimed to secure

this result, and the hundreds of returns, with their illuminating descriptions and suggestions, proved the value of a procedure which appeals to the employees as intelligent and thinking beings.

In this attempt to chart the various tasks, besides the unique feature of bringing to light the ideas and experiences of those actually doing the work, several valuable checks were devised to make the returns as thorough as possible. One effective device was to require of every executive or superior in charge of any group a description in detail of the tasks performed by the various individuals under him. We have thus two instruments in the attempt to size up a particular task: one, the statement of those actually engaged in them; the other, the statement of those who have charge of a group or division. A comparison of what a salesgirl says about her particular work, and what the buyer or floor manager says of that same work, affords many an illuminating lesson. Often the two agree quite well, in which case we are on the way to a fair definition of the task; but when divergences appear there is food for thought.

The plan does not stop here. Thoroughness being the aim in the Bamberger house, two more steps are called for before a task may be said to be defined. An investigator is at work on a schedule of his own, making observations of each position. He is collecting data as to what duties and qualifications each position involves as he sees it.

His statement, that of the worker, and that of the supervisor—in other words, the three versions of the same task—were finally given to Mr. Bloomfield, who formulated a definition which, when passed by the firm, became the standard specification for the task.



Employees' Grocery Store, Wm. Filene's Sons Retail Clothing House, Boston, Mass. Goods are sold at cost to members of the Coöperative Association





In formulating such standard task-definition the basis is, of course, the material gathered from the three sources already mentioned, but the final work is essentially one of creative interpretation.

This interpretation, influenced by the data to be found in the three statements of the same task, aims to reconcile whatever divergences may appear in the account and to bring out essential elements, in some statements only hinted at and in others more or less implied. This final step also secures a uniformity of description and a statement representing the store spirit and policy.

The foregoing account may give the reader the impression of elaborateness of method. On the contrary, the procedure is of the simplest. Of equal importance with obtaining a sound task-description is the arousing of intelligent interest in the particular task an individual employee is doing. The co-operative survey carried on in the Bamberger store goes a long way to accomplish this purpose.

The plan just described is still in process of application. It is but an initial step in the organization of a personnel department. Among the first uses to be made of the results is to furnish the employment department with definite data about actual needs and requirements in every opening to be filled, and to supply new employees with details and suggestions about the work they are engaged to do, with a definiteness rarely found in plans for initiating new employees in their tasks. In addition, the educational department will find its work of instructing new employees materially forwarded. Above everything, such work carried to completion establishes a basis for rating efficiency less subject to personal whim and misjudgment

than is the case where the demands of a task are indefinite and shifting.

A form letter, used in the work above described, is here given:

LISTING "UNDERSTUDIES" AND FUTURE EXECUTIVE MATERIALS

To ——

May I ask your co-operation in securing from you a reply to the question below? The purpose of the question is merely to gather information along the same line of "human" inventory, as it were, which is attempted in the position schedule you filled out.

The question is: Is there anyone working with you in any capacity, whom you regard as your understudy; who is being trained directly or indirectly in a knowledge of your own particular work? If there is any such person or persons (for there may be understudies for different parts of your work), please give me their names and tell briefly how they are being developed.

The answer as well as the question are matters of strict confidence; no action of any sort, affecting any individual, is in view.

The management is interested in learning to what extent executives are keeping an eye on a possible assistant (although no promise of any kind is implied), and what is being done to train and develop such future executive material.

If you have no one in view, will you state if you plan to select some one in your force for development?

(Signed)

The methods in use by most firms who prepare an analysis of the tasks are very much less thorough than those suggested by Mr. Bloomfield. Of the fifteen firms appearing on the chart facing page 32 only five or six had carried their analyses far enough to include more than a few highly specialized tasks. The usual procedure is that described by R. J. Burke of the Detroit Steel Products Co.<sup>1</sup>

<sup>1</sup>*The Annals* of the American Academy of Political and Social Science, May, 1916, page 176.

When the various jobs have been classified by title or designation in each department and the one who is to write the specifications has obtained at least a fair acquaintance with the general nature, organization and aspects of the business the following method of attack is suggested.

First, select some particular department and after ascertaining from competent authority its general kind of work and relation to the other departments, spend some time watching the employees at work; observe their motions, efforts, habits, system. *Notice what they do and how they do it*, Talk with several employees and get their idea and description of their respective jobs, as well as of the department as a whole. It is also a good plan to get the opinions and ideas of persons not directly engaged in any work in that department but who in the course of business come more or less in contact with some phase of its activities.

Note the physical surroundings and general conditions. Make copious notes.

The next step is to analyze the various jobs from the point of what they do and *why* they do it. Then having satisfied ourselves of what is necessary and essential, a rough definition may be drawn. This should cover in general a description of the particular job and what would seem to be required by way of a specific person to fill the job,—the physical, intellectual and character essentials. When completed this should be submitted for the opinion of those engaged, directly or indirectly, in the work. More often than not several changes will be found necessary because reading the description as a whole often points out misstatements and inadequacies to the man in the shop whose mind is not always organized to fully and exactly express himself in conversation. It is a chief consideration to be well borne in mind that each specification, before being adopted, should have as full and sincere understanding and approval of those who are to have authority over the person described, as can be had by a practical accommodation of the various ideas and opinions into one single definition. This allows for all the advantages that accrue from a spirit of common council and makes for the successful use of the specifications.

It is also a good plan to make express statement of what the employee need not be so as to check, if possible, the petty notions and prejudices of some and make clear the intentions of the management. This would cover politics, religion, race, nationality, etc.

Following is a sample specification for a press hand.

*Power Press "A"*

Department X

Power Press "A":

Should have had experience on small press and bench machines or work similar—to acquire knack, carefulness and speed rather than any special skill. Physically such operatives should have considerable endurance and stamina for the work is in itself machine-like, and 90 per cent of it is done on the feet. Height about 5 feet 2 inches to 5 feet 5 inches, with weight proportionate—sturdy physique and from 17 to 19 years of age. Good muscular co-ordination and of such order of intelligence as is satisfied and inclined to reduce its work to terms of continuous, single-grooved habit.

As a natural corollary it is obvious, therefore, that an over-responsive, overkeyed, nervous organization would be dangerous on account of accidents, and would also make the work disagreeable, and hence not a "good job" from employee's standpoint. To make for a permanent force, other things being equal, it is very essential that the intelligence be not overactive or imaginative, and that the employee be such as would consider himself acquiring nothing beyond his expected stipend and the knowledge of running that kind of machine.<sup>1</sup>

An excellent example of this sort of work is furnished by a department in a factory which provides employment for some 2300 persons and lists over 150 different occupations, many of them found only in this particular industry. The most difficult problem in selection was to find non-skilled employees for these jobs, as it was out of the question to provide skilled operatives in sufficient numbers.

As a partial solution of the difficulty, the employment manager prepared complete specifications for each job. The experience of high-grade workmen,

<sup>1</sup> The author seriously questions the wisdom of the general policy indicated by such a basis of selection. See No. 6, page 55.



foremen, and department heads was drawn upon, in addition to personal observations made by the employment manager.

When completed each analysis contained a brief description of the requirements of the position: The training and experience desirable in an employee; age, height, and weight best suited to the task; the posture of the employee, whether sitting, standing, stooping, or walking; wages at the start, the time taken by the average employee to earn an advance in wages, and the probable maximum rate; likelihood of seasonal or constant employment at the task; a brief description of the employee's duties.

On the basis of these job analyses, positions are graded as "A," "B," or "C," according to maximum earnings and general desirability of the position. Positions in group "A" are most desirable in every way; those in group "C" least desirable. When a position in group "A" is open, the employment department tries to fill it by advancing a group "B" employee; or if no one is available in that group, by transferring some one from group "C." Promotions occur often enough to make it possible for the company to attract a much higher type of employee to positions in grade "C" than was possible before the new plan was inaugurated.

On pages 54 and 55 are given sample analyses used by this department.

The advantages of written specifications developed along the lines suggested by this chapter may be briefly summarized as follows:

1. Employees and executives are forced to think seriously and systematically about the tasks and the possibilities of better conditions, as well as of in-

creased production. It leads to intelligent interest on the part of the working force.

2. The employment department is assisted in selecting new employees.

3. Information and suggestions can be given to new employees with a definiteness otherwise unattained.

4. It helps establish a more effective scheme of relationship between executives and the working force and through a better understanding of requirements lessens the likelihood of disagreement. A complete record of facts is available when disputes arise.

DETAIL OF JOB—JONES MANUFACTURING CO.

**Job. No.** 3-1G.

**Grade.**

**Occupation.** Gummed Label Cutter.

**Duties.** To cut plain and printed gummed labels in lifts of 25, 33, or 50, with hollow steel die and mallet.

.....  
**Time Required to Learn Job.** Three months.

**Previous Training or Experience.** Unnecessary.

**Starting Wage.** \$8.00.

**Next Advance.** \$9.00.

**Wage Limit.** \$15.00.

**Age.** 18 to 35.

**Height.** 5 feet 6 inches.

**Weight.** 115 to 135.

**Posture.** Standing.

**Motion.** Quick.

**Hands.** Average.

**Eyesight.** Normal.

**Schooling Desired.** At least full grammar.

**Overtime. Lay-offs.** None.

5. It materially aids the education department in planning and carrying on its work.

6. New opportunities for transfer and promotion are brought to light. High-grade positions are always filled from within and the less desirable tasks are taken by better men because of the chance of advancement.

7. A better basis for efficiency rating is made possible. Demands are definite, instead of shifting and subject to whim and misjudgment.

8. Close attention to each task helps to bring out its undesirable features. Health and safety work are promoted.

DETAIL OF JOB—JONES MANUFACTURING CO.

**Job. No.** 4-1G.

**Grade.**

**Occupation.** Paper Box Maker.

**Duties.** To cover pasteboard forms with glued strips of paper cut to size, so as to make fine paper boxes. Must be *right*-handed.

.....  
**Time Required to Learn Job.** Six months.

**Previous Training or Experience.** Unnecessary.

**Starting Wage.** \$7.00.

**Next Advance.** Piece work.

**Wage Limit.** \$12.00.

**Age.** 16 to 30.

**Height.** Average.

**Posture.** Sitting.

**Motion.** Quick.

**Hands.** Small.

**Eyesight.** Normal.

**Schooling Desired.** Is not a material consideration.

**Overtime. Lay-offs.** None.

9. Wage and salary schedules can be more completely standardized. Better knowledge of the task means a more stable basis for rates of payment.

10. All the functions of the employment department are placed upon a scientific basis. Exact knowledge of working conditions is fundamental to all of the activities of this department. Without it, fair dealing and industrial progress are impossible.

## CHAPTER VI

### THE VITAL PROBLEM OF SELECTION

PATIENT and persistent efforts have been made for years to develop systematic methods for judging the fitness of different individuals for the multitude of tasks that modern civilization has imposed upon its workers. Some of the phrenology and physiognomy of an earlier day, when alchemy and astrology were still included in the curricula of the leading universities of Europe, has been revived and paraded in a fresh "scientific" garb. While some of the advocates of these systems have developed a certain amount of shrewdness in judging character and in analyzing aptitudes, no one has yet been successful in formulating a method based on their procedure that is susceptible of scientific proof or that can be effectively practiced by others. Applied psychology has been somewhat more conservative. Its tentative solutions are hopeful, and with continued experimentation and the accumulation of data something practical may be looked for in the course of time.

Interest in the vocational guidance movement is widespread and constantly growing. Its value to industry as well as to the individual has been clearly shown in numerous cities where a conscientious effort has been made to make it a part of the educational



program. Open-minded executives have welcomed the spirit in industrial management that looks to a wiser selection of employees as one of the highly important means of stopping the waste due to irregular and unsatisfactory employment. They are willing to co-operate in any movement that promises more sensible decisions by both parties to the transaction, the employer and the workman.

Some firms have already made splendid progress in the right direction; and although their difficulties are by no means ended, their experience is proving what the possibilities are. We have here tried to outline a few of the fundamental principles that are governing fairly successful practice in the selection of employees.

#### APPLICATION BLANKS

Of the thirty firms listed on the chart facing page 32 only seventeen, or 56.6 per cent, use any form of application blank. Considering only Group II, firms having a separate employment department, the figure increases to 77.7 per cent. Two other departments in Group II make a careful record of the interview which takes the place of the usual form. In order to arrive at some definite conclusions as to the questions asked on such blanks, those used by these firms and those of eight others located in various parts of the United States—in all the application blanks of twenty-five firms, each employing 1000 or more people and representing a wide variety of industries—were analyzed as indicated in the following table. Questions occurring only once were not included in the list. None of the questions, save the first, appeared on all of the blanks.

In addition to the questions appearing in the table, two of the blanks contained numerous "self-analysis questions" and portions to be filled out by the employment supervisor, patterned after the forms advocated by a certain widely advertised system of selecting employees.

Questions in the table are arranged in order according to the number of times used.

GROUP I. QUESTIONS APPEARING ON ELEVEN OR MORE OF THE  
BLANKS

1. Give your full name and address.
2. What is your age? (or, give the date of your birth).
3. Date of this application.
4. Are you married?
5. Give the names and addresses of your former employers.
6. How long were you employed in each of your former positions?
7. What has been the nature and extent of your education?
8. What is your nationality?
9. For what position are you an applicant.
10. Why did you leave each of your former places of employment?
11. What persons (or how many persons) are dependent upon you for support?
12. What wages did you earn in each of your former positions?
13. What is your height and weight?
14. Give the names of references other than your former employers.
15. Have you been employed by this company before?
16. How many children have you?

GROUP II. QUESTIONS APPEARING ON FIVE TO ELEVEN OF THE  
BLANKS

17. Under what foreman or in what department did you work when previously employed by this company?

18. Have you any disease or any mental or physical disability which might impair your ability to work? (A general question, worded in various ways.)
19. What wages do you expect?
20. What is your telephone number, or the number of the nearest telephone?
21. Where were you born?
22. Do you use intoxicating liquors?
23. Give the names of your relatives or acquaintances who are employed by us.
24. Give the date when you were previously employed by this company.

GROUP III.      QUESTIONS APPEARING ON TWO TO FIVE OF THE  
BLANKS

25. Do you smoke cigarettes (or in what form do you use tobacco)?
26. What languages can you speak?
27. Do you live with your parents or relatives, keep house, or board?
28. State the nature of your present employment.
29. Is your eyesight or hearing impaired in any way?
30. Give the names and addresses of your parents if they are living.
31. Where were your parents born?
32. How much time did you lose last year (or, during the last five years) on account of illness? State the nature of the illness.
33. Whom shall we notify in case of a serious accident?
34. What is your father's occupation?
35. If foreign born, when did you come to the United States?
36. What is your religion (or, of what church are you a member)?
37. Do you desire a permanent or a temporary position?
38. When will your services be available?
39. Have you or any of your family had tuberculosis?
40. Have you ever been ruptured?
41. Have you been divorced?
42. Are you willing to move to other divisions of our company?
43. What is your wage contribution to the support of the family?
44. Have you been naturalized?





The Dental Clinic of a Factory Employing about 800 Persons



A statement similar to the following, followed by a blank space for the applicant's signature, is often a part of the application form:

I certify that my answers to the above questions are true, and that the medical examination requested by the company is to be made with my consent; and I also agree to submit to such future examinations as may be required by the Company. I further agree that the above questions shall form the basis and become part of my contract of employment and that any untrue answers will render the contract null and void.

This statement may also contain a promise to join the company's mutual aid association, or an agreement that the engagement of employment may be terminated at any time without notice at the option of either the company or the employee.

Among the questions occasionally asked are the following:

1. What are your reasons for desiring employment with us?
2. If employed, could you work continually?
3. What is your riding distance, in minutes, from our factory?
4. Have you ever had a lawsuit with the Company? (Inserting the name of the concern, such as telephone company, or railroad.)
5. Are you able to distinguish colors?
6. Do you ever play games of chance, or gamble in any way whatsoever?
7. Were you ever rejected by a Guarantee or Surety Company? If so, for what reason?
8. Check the following list as accurately as you can, noting each that pertains to you:

careful	careless	industrious	lazy
courteous	discourteous	cheerful	gloomy
obedient	disobedient	patient	impatient
orderly	disorderly	quick	slow
good memory	forgetful	sober	intemperate

Questions 4, 5, 6, 7, and 8 of the above list have been shown by the experience of managers and by experimental psychology to be of comparatively slight value on any application blank. The applicant cannot pass judgment upon Numbers 5 and 8 with any degree of assurance that his answers are correct or will agree with the opinions of others, and he will be very unlikely to give anything but ambiguous answers to Numbers 4, 6, and 7 if he feels that his replies are to be used to his detriment.

In the case of railroads where color discrimination is an important factor in the applicants' fitness, a thorough experimental examination is made on this point with entirely satisfactory results.

Where the blanks could be checked up with the practice of the firms in hiring, there was ample evidence that answers to many of the questions on the more complicated blanks were not considered of much value. It is plain that a considerable number of the questions in the above table could be of no possible significance to most firms. One employment executive states that the following points are the only ones deemed essential in his department:

- Name and address
- Date of application
- Date and place of birth
- Date of immigration, if foreign born
- Parentage
- Languages spoken
- Education
- Whether married or single
- Number in family
- Wage contribution to family support
- Record of previous employment

He justifies some of his selections in this way:

The idea should be to keep such records as simple as possible—only the important details being entered.

Languages spoken may be important in many organizations for various reasons. In this establishment English-speaking applicants are given preference. In case employment should be given to an applicant who does not understand English, the applicant must agree to attend one of the classes in English which are held at the factory.

Where applicants do not speak the English language, it has often been found that their residence in the country, and, consequently, their employment, is considered merely temporary by them. In the case of those who do not speak the English language, it has been found very difficult to impart instructions and to obtain proper standards of output and quality.

The matter of wage contribution is important. Other things being equal, preference should be given to those who have to support themselves or whose contribution to the family income is a necessity. The custom of contributing the entire earnings to the family income is often an important element in inefficiency, especially where the contribution is in whole or in part unnecessary. Younger women who live at home are often required to turn over the entire contents of their pay envelopes to the head of the family, even where such a contribution is not necessary. By depriving the worker of the use of his earnings, the incentive toward efficiency is removed and ambition destroyed. Cases of this kind are being constantly handled by the Employment and Service Department. A home visit by one of the staff has always resulted in an agreement being reached with the parents by which a stipulated sum was paid into the family exchequer and the remainder of the earnings kept by the employee in question and deposited in the Penny Bank. Such an arrangement has always proven beneficial and has developed an increase of efficiency ranging from twenty per cent upward.

Information as to past employment is important as a record of experience and earnings. The number of positions held is also an indication as to whether or not the applicant is a floater. For purposes of reference, this information is of little or no value and is never used. Wherever possible, however, applicants give as their references members of the organization. This tends to keep alive in the organization an active interest in the kind of new employees. It is, more-

over, a good indication of the applicant's character, since, although a person cannot always be judged by his family, he can generally be judged by his friends.

Another employment manager who makes a constant practice of asking for the names of acquaintances in the employ of the company has this to say:

We have uniformly good results from the work of applicants who are recommended by our own employees. Valuable additional information is gathered in this way concerning prospective employees, and we are frequently able to check up cases of voluntary leaving very satisfactorily by referring to the same persons when the employee leaves us. Our older employees send us the majority of our applicants because they pass around the word that it is a good place to work.

On the whole, the practice of the most successful employment departments would seem to indicate that such a thing as a "standard application blank" is not desirable. Very little has been accomplished even by firms engaged in similar lines of work by way of standardizing their record forms. Several large companies employ two or more different application blanks for employees engaged for entirely dissimilar occupations, as for office and factory help.

The cumbersome folder, such as that used by the United States Civil Service Commission, is not generally favored. If the blank is to become a part of the employee's permanent record, it should be on a single sheet, not larger than about 8 by 10 inches, or on a card about 5 by 8 inches. This facilitates filing, and any desired information can be found at a glance.

Space is usually given on the card for a record of such matters as the department to which the employee is assigned, rate of wages, the date of engagement,

signature of the superintendent, etc. Notes by the interviewer can be conveniently placed on the back of the card or sheet. Different colors are often used to indicate different departments, or male and female help.

.....191.....			
Name.....			
Street.....		City.....	
Were you ever employed by this Company		YES No	
		If so by what Foreman	
Age	Married or Single	Nationality	Height
			Weight
Education			
Former Employers		Kind of Employment	From To
1 Firm's Name			
Address			
2 Firm's Name			
Address			
3 Firm's Name			
Address			
Applicant Accepted By.....		Date.....	

**FORM NO. 1. APPLICATION BLANK USED BY A MANUFACTURER OF RUBBER GOODS**

The original is a thin yellow card, 6 by 4 inches, suitable for index file

Using the application blank as a means of getting rid of undesirable candidates is usually discounted. It is decidedly unfair to the applicant to allow him to waste his time in filling out a blank and waiting possibly indefinitely to learn whether or not



it has been acted upon. A frank statement of the reasons for his rejection would help many a man, and in the great majority of cases such a statement would not compromise the management in any way.

The specimen blanks which follow will serve to illustrate methods now in use by large companies that have proved effective in practice.

Form No. 1 is used by a manufacturer of rubber goods. All applicants are interviewed briefly by the employment manager or his assistants. Those who seem most desirable are brought into the inner office for a longer consultation. The interviewer fills out the blank, and the references are looked up and recorded briefly on the back of the card before the applicant is finally accepted. If time permits, the employment manager calls in person upon former employers or other acquaintances. In more urgent cases they are called by telephone, or letters of inquiry are sent. Personal calls upon former employers have been very helpful in locating individual weaknesses against which foremen or department heads may be warned.

A large department store uses Form No. 2. All references are carefully followed up, including the school records of applicants under 24 years of age.

Forms Nos. 3 and 4 are used by a publishing house. No. 4 is filled out by applicants for places in the manufacturing department, while No. 3 is used for positions where educational requirements are of greater importance. Applicants are shown into an ante-room, where those who are obviously undesirable are weeded out. Those who appear to deserve further consideration are requested to fill out application blanks which are delivered to the manager of the employment division, who thus has an opportunity to analyze each



*Fill Out Both Sides*

(Give every place where you have worked. Begin with the last place and mention every one back to the first

NAMES AND ADDRESSES OF FORMER EMPLOYERS		Time of Employment State Actual Dates	State whether you were Dis- charged or Resigned, and why
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	
Place	Kind of Business Your Position	From	
Address	Sal. Rec'd	To	

Give Names and Addresses of business or professional men or women (not relatives) who have known you for some time  
If possible, give pastor's, family physician's or landlord's name

NAME	ADDRESS	OCCUPATION

*Fill Out Both Sides***FORM NO. 2. BACK**

The face of this form is shown on page 67

APPLICATION FOR EMPLOYMENT		Date.....	
Name in full..... Date of Birth.....			
Address..... Telephone No.....			
Name and Home Address of Parent or Guardian.....			
Grammar School.....	Years in High School.....	College or Com- mercial School.....	
Married or Single.....	Previous Salary.....	Salary Expected.....	Ever Employed by this Company.....
Position Desired.....			
	Latest Employment	Previously Employed by	Previously Employed by
Name . . . . .			
Address . . . . .			
Nature of Position			
Length of Service			
Reason for Leaving			
References {	Name.....		Address.....
	Name.....		Address.....

## FORM NO. 3. APPLICATION USED BY A PUBLISHING HOUSE

The original is on white paper, 8 inches wide and 5 inches high. As here condensed it serves to show the printed matter only. See page 70

applicant's previous experience before he is shown into the manager's inner office.

Application blanks in the employment department using Form No. 5 are classified as to age, sex, and apparent suitability. Persons are never hired at the time the applications are made, but one or more applicants are sent for when a position is to be filled. A definite time is set for their appearance, and self-

Name .....					
Employed as .....					
Department .....				Division .....	
Date of .....				Registry .....	
Engagement .....		Salary .....		Number .....	
List .....					
Hours {	In .....	In .....	Sat. {	In .....	In .....
	Out .....	Out .....		Out .....	Out .....
Mgr. ....				Approved .....	
Salary Increases .....					
Transfers .....					
Date of Discontinue .....				Qualifications .....	
Cause .....					
Late .....				Absent .....	

---

Employed as .....					
Department .....					
Date of .....				Division .....	
Engagement .....				Registry .....	
Salary .....		Number .....		List .....	
In .....		In .....		In .....	
Hours {	In .....	In .....	Sat. {	In .....	In .....
	Out .....	Out .....		Out .....	Out .....
Mgr. ....				Approved .....	
Salary Increases .....					
Transfers .....					
Date of Discontinue .....				Qualifications .....	
Cause .....					
Late .....				Absent .....	

---

Employed as .....					
Department .....					
Date of .....				Division .....	
Engagement .....				Registry .....	
Salary .....		Number .....		List .....	
In .....		In .....		In .....	
Hours {	In .....	In .....	Sat. {	In .....	In .....
	Out .....	Out .....		Out .....	Out .....
Mgr. ....				Approved .....	
Salary Increases .....					
Transfers .....					
Date of Discontinue .....				Qualifications .....	
Cause .....					
Late .....				Absent .....	

**FORM NO. 3. BACK**  
 For face of this form see page 69



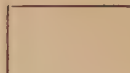
addressed postal cards are enclosed to be mailed in case appointments cannot be kept. At the second interview selection is made for immediate employment, and the fitness of the applicant is decided upon the basis of the interview and a medical examination.

<b>MANUFACTURING DEPARTMENT</b> [COPY] <b>APPLICATION FOR EMPLOYMENT</b> TO The                      Company	<i>Date</i> .....
1. Name in Full..... 2. Home Address..... 3. Present Age..... Date of Birth..... 4. Married or Single..... 5. Position Desired..... 6. Experience..... ..... 7. Member of Labor Organization..... { Present or Latest Employer..... 8. { Position..... { Length of Service..... { Reason for Leaving..... 9. Former Employers..... ..... ..... .....	
3585B	

**FORM NO. 4. USED BY A PUBLISHING HOUSE**

The original is 8 inches wide and 5 inches high; and the reproduction here shows the type matter but distorts the spacing. For back, see page 72

## RECORD OF EMPLOYEE



Name..... Registry No.....

1. Employed as..... in..... Division  
 2. Date of Engagement..... 191 . Salary \$..... per.....  
 3. Discontinued.....  
 4. Cause.....  
 5. Late .....Times .....Minutes. Absent.....Times .....Days  
 6. Department.....  
 7. Remarks.....  
 8. Signed..... Mgr. ....Supt.

1. Employed as..... in..... Division  
 2. Date of Engagement..... 191 . Salary \$..... per.....  
 3. Discontinued.....  
 4. Cause.....  
 5. Late .....Times .....Minutes. Absent .....Times .....Days  
 6. Department.....  
 7. Remarks.....  
 8. Signed..... Mgr. ....Supt.

1. Employed as..... in..... Division  
 2. Date of Engagement..... 191 . Salary \$..... per.....  
 3. Discontinued.....  
 4. Cause.....  
 5. Late .....Times .....Minutes. Absent .....Times .....Days  
 6. Department.....  
 7. Remarks.....  
 8. Signed..... Mgr. ....Supt.

FORM NO. 4. BACK  
 For face of this form see page 71

## THE PROBLEM OF SELECTION

APPLICATION RECORD OF Doe, Jane					SAMPLE	
APPLIED Apr. 15, 1915		Address 1323 W. 48th St,		For Hand Work		
Birthdate Oct. 6, 1897		Birthplace Cleveland, Ohio		Suitability Fair		
Immigrated		Parentage Am.-Ger.		Married No		
Family F.M. S 14-12-16 B. 22				Wage Contrib. Partial (necessary)		
REFERENCES (IN OUR EMPLOY)						
Mary Smith		3				
Susie Jones		3				
PREVIOUS EMPLOYMENT		Time		Capacity		
John Smith & Co. (Waists)		13 mo		Hand Sewing		
Brown Bros.		1 yr		Clerical		
Mrs. S. T. Baker, Lorain		9 mo		Housework		
American Knitting Co.		4 mo		Clipping		
EMPLOYED May 10, 1915		By M		Class W.P.W.		
Operation Sleeves felled				Locker 1027		
				No. 842		
				Rate P.W.		
				Fore. J.T. Checked ✓		
Approved		Signature				
S		R		Jane Doe		

## FORM No. 5

For comment on this form see page 69

The original is a thin yellow card, 8 inches wide by 5 inches high, suitable for index file. For back, see page 74

<p> <b>QUALIFICATIONS:</b> A 2 plus          Languages Eng. Ger.          Education 7th grade (Public School) 3 mo. Business College       </p>	<p> <b>NOTES:</b> Anemic, listless in appearance. Will need careful follow up physically. Desirous of working because she has heard there is good chance for advancement. Father out of work most of the time. Mother came along when application was taken and promised to co-operate with nurse, etc.       </p>
---	--

Form No. 5. BACK  
 For face, see page 73

References are rarely looked up by the department using Form No. 6. The manager considers that it is worth while to talk about candidates with his own employees, but believes that employers as a rule give out no information that is very helpful. The inter-

EMPLOYMENT RECORD				
Name of Applicant.....		Date.....		
Address.....		Clock No.....		
NEAREST TELEPHONE (Name and Number).....				
Rate of Pay Wanted.....				
Where Born.....		Birthplace of Father.....		
Date of Birth.....		Birthplace of Mother.....		
Married?.....		Number Dependent for Support.....		
Did you go to Grammar School?.....		High School?.....		
College or Tech.?.....				
Name of last school attended.....		Did you graduate?.....		
What course did you take?.....				
What trade?.....		Where learned?.....		
Previous Employment (Last 3 jobs)				
Firm	Kind of Work	From	To	Reasons for Leaving
References (Give 3 names preferably of those working here.)				
(OVER)				

Height.....  
 Weight.....  
 Rupture.....  
 Eyesight.....  
 Feet.....  
 Hearing.....

## FORM No. 6

Original is a blue card, 8 inches wide by 5 inches high. The reproduction here distorts the proportions and spacing. For back, see page 76



viewer, in conversation with the applicant, draws him out as much as possible and from this interview re-

INTERVIEWER'S IMPRESSIONS AS TO

Willingness to Work.....

Knowledge of Work.....

Probable Activity.....

Probable Initiative.....

Probable Loyalty .....

Courtesy.....

Sobriety.....

Booster vs Knocker .....

Willingness to Improve.....

Stability.....

Hired by..... Dept.....

FORM NO. 6. BACK

Text matter. See explanation under Form No. 6, page 75

cords on the reverse of the form his impressions of the qualities of the man as to

Willingness to work,  
Knowledge of work,  
Probable activity,  
Probable initiative,  
Probable loyalty,  
Courtesy,  
Sobriety,  
Booster *vs* Knocker,  
Willingness to improve,  
Stability.

## APPLICATION FOR EMPLOYMENT WITH MANUFACTURING COMPANY

ANSWER ALL QUESTIONS FULLY AND FRANKLY.

No. \_\_\_\_\_ Date \_\_\_\_\_ 191 \_\_\_\_\_

Name in full. \_\_\_\_\_

Address in full. \_\_\_\_\_

Descent or Date of Height Weight  
nationality birth \_\_\_\_\_Married Have you any How many dependent  
or single children? \_\_\_\_\_ upon you for support? \_\_\_\_\_Do you live How long have you lived  
with your parents? \_\_\_\_\_ at your present address? \_\_\_\_\_Have you What kind of work do you wish?  
any trade? \_\_\_\_\_Give grade of last If employed here can  
school you attended? \_\_\_\_\_ you work continuously? \_\_\_\_\_Is your Have you any How much time have you  
health good? physical or lost by sickness during  
mental defect? the past year? \_\_\_\_\_Have you been em- Dept. Wages  
ployed here before? When number earned \_\_\_\_\_

Why did you leave? \_\_\_\_\_

Where did you work last? \_\_\_\_\_

How long? Wages How many hours a  
earned week did you work? \_\_\_\_\_

Why did you leave? \_\_\_\_\_


Where did you work  
previous to the last place? \_\_\_\_\_How long? Wages How many hours a  
earned week did you work? \_\_\_\_\_

Why did you leave? \_\_\_\_\_

Have you any relatives  
working in this factory? \_\_\_\_\_Give the name of someone  
in this factory with  
whom you are acquainted \_\_\_\_\_Give us the names and addresses of two persons, other than relatives or personal freinds,  
to whom we can refer. \_\_\_\_\_*This will give you notice that we have provided for payment to our injured employees under  
Chap. 761—acts of 1911*FORM NO. 7. APPLICATION BLANK DESIGNED TO SERVE AS  
PERMANENT RECORD

White paper, 6 inches wide and 8 inches high. For back, see page 78

Note is also made on the card to show by whom the man is hired and in what department. Then he is turned over to the physician's assistant who fills the blanks after "height," "weight," etc., at the end of the card. The physician is then called in to complete the medical examination. (See Form No. 8, page 88.)

BELOW LINES ARE <i>NOT</i> TO BE FILLED OUT BY APPLICANT.			
Employed for Dept. ....	Work to begin .....	Position .....	Starting Wage .....
Estimate	<div style="border: 1px solid black; width: 80px; height: 40px; display: flex; align-items: center; justify-content: center;">  </div>		
.....			
.....			
.....			
Transferred to Department..... Date..... Reason.....			
Left..... Reason for leaving.....			
Remarks.....			
.....			
.....			

### FORM No. 7. BACK

This text is carried on the upper half of the back of the form shown on page 77

The application blank shown in Form No. 7 is folded at the dotted line in the center and placed in a manila folder of the same size which will later contain all the employee's records such as transfers, suggestions made, training-department records, etc.

### INTERVIEWS

Of the thirty-seven firms visited by the writer, thirty claimed to have a fairly extended interview with each

applicant. The other seven hire a large amount of unskilled help and often ask very few questions of prospective employees. The following are representative responses from the firms who replied to Question No. 4, Part III, of the questionnaire: "What questions do applicants answer other than those on your application blank?" (Numbers refer to the firms listed on the chart, facing page 32.)

No. 5. Have no application blank. Questions of a general nature are asked, usually relating to the job, in order to get man to express himself. Find out about habits, family, etc.

No. 10. No application blank is used. Ask: Married; nationality; residence; former employers, etc. References are followed up for permanent employees, not for temporary help.

No. 12. Two superintendents interview all applicants. The general superintendent spends as much time as possible with them while they are meeting new employees. He feels that although the two superintendents are experienced men, he can still give helpful suggestions at times, and likes, moreover, to take a great deal of personal interest in his employees.

No. 13. Impossible to answer in detail. A general conversation is carried on with an attempt to get all possible information about the applicant: His past experience; education; family life; likes and dislikes; general characteristics.

No. 14. After the applicant has filled out an application blank he is shown into the manager's office for an interview. We feel there is much to be gained from Doctor Katherine Blackford's teachings, although we are not prepared to accept them *simon-pure* yet. . . .

Most of us judge unconsciously by fundamental phrenological standards. A firm, steady eye indicates honesty and reliability and a shifty eye indicates shiftiness of character. With most of us, however, the color of the eye as yet remains of no significance. We judge by the set of the chin, the shape of the mouth, the courteous vigor of the hand-grip, the individual's address and bearing.

We judge, too, by the individual's clothes, for as a general

proposition, conservation in clothes suggests a desirable mental equivalent, and shabbiness or carelessness that would be a liability in most positions.

For certain clerical positions such as those of stenographer, typist or auditor, the applicant is also required to undergo a test and to measure up to certain standards before he or she is referred to the executive in the operating department.

Immediately after the interview, or during it, the manager of the employment division fills out one of our analysis cards with which it is possible to mentally reconstruct the applicant at any future time, in order to consider him for any later vacancy, if he is not employed immediately. These analysis cards contain eight divisions, as follows:

Personality	
Build	
English	
	Executive
	Detail
Type of mind	Promotive
	Accounting
	Analytical
Appearance	
	Super-alert
	Alert
Mentality	Average
	Slow
	Dull
Initiative	
Remarks	

These phrases explain themselves, with the exception, possibly of "super-alert." This home-made phrase is intended to suggest that type of mind which is *too active*—almost effervescent; a type of mind which is seldom accompanied by the stability and saneness which are requisites in most positions.

No. 15. We have no "set" of questions. We ask anything that will enable us to reach a decision as to applicant's ability and probable permanency. In selecting from our waiting list an applicant for a given position, we review the information revealed by the interview and the application blank. If it is decided that an applicant can meet the requirements of a certain job, we then give consideration to any



influence external to the industry which may cause the applicant to leave. We ascertain why he seeks employment with us; where he regularly lives; what his earnings were in his former position, and why he left it. In most cases we can get in addition other information from persons in our employ, the names of whom are usually given by applicants as references.

No. 17. Besides questions appearing on our application blanks, employees answer a number of questions mostly relating to personal affairs, their past general history and their attitude of mind. The results are noted on the back of the application blank. The chief thing is to have the employee talk and tell all about himself.

No. 19. We use no application blank. The employment manager conducts a personal interview and makes notes for his reference file.

No. 21. Seldom any questions of value.

No. 23. Men are questioned as to particular class of work they have been working on, also as to any other work they may be capable of doing. They are asked whether or not they have served an apprenticeship at the particular trade in question. There are many other small questions peculiar to each job which are too numerous to mention here.

No. 24. No specific questions. The interviewer tries to draw each man out to talk about himself.

No. 25. We question as to experience and especially as to kind of machinery used. Try to find out whether or not girls are nervous in order to avoid putting such cases on machines. Ask about family; number, whether boarding or living at home, any dependents.

No. 26. Condition of health, financial status, and some family history. Kind of work desired. Probable length of employment, whether seeking temporary or permanent work. *Whether member of Union.*

No. 30. Detailed inquiry into experience of skilled persons.

A very common practice is that of requesting a foreman, department head, or other executive to interview and pass upon an applicant before he is finally employed. Not only does this serve to overcome in part the dislike of foremen or department heads to

the relinquishment of their former authority where employment departments have been newly instituted, but it is also commendable as a means of getting a second person's judgment upon the case. In this connection Professor Walter Dill Scott of Northwestern University makes these suggestions:

The technical ability of the applicant for a selling position is determined by means of a selling performance as indicated by the following "Instruction to Applicants" blank. Each "Buyer" estimates the selling performance on a percentage basis. The estimates of these several "Buyers" are combined into a single grade expressive of the applicant's technical ability as a salesman. Whatever the technical ability is, it must be expressed in quantitative terms before it becomes serviceable.

#### INSTRUCTION TO APPLICANTS

In Room A is a merchant who is to be regarded as a "buyer." You are to enter Room A, introduce yourself to Merchant A, and try to sell him some kind of merchandise. You will spend five minutes with Mr. A, then pass on to Room B and repeat your selling talk to Merchant B. You will keep this up till you have called on all the "buyers."

You may sell any line of merchandise. The following are examples: automobiles, breakfast food, clothing, fountain pens, life insurance, office supplies, real estate, rubber goods, sporting goods, tobacco, typewriters, etc.

You may make the same talk to each "buyer." If you decide to sell an automobile, then you may assume that each of the merchants is an automobile dealer. If you decide to sell a breakfast food, then assume that each "buyer" is a grocer, etc.

Present your merchandise for five minutes in such a way that the "buyer" will actually want to purchase your line. Sell as you would if the "buyer" were a real prospective.

Prepare your line of talk in advance.

The personality of the applicant is an important factor but one particularly hard to reduce to quantitative determinations. The method which the writer has been employing is

to have several "Interviewers" pass judgment upon the applicant. This judgment is based on personal appearance, tact, industry, promise of usefulness to the company, etc. Whatever the qualities are that are judged the "Interviewers" must summarize their judgment in a single figure, ordinarily, but not necessarily, a percentage figure. The judgments of all the "Interviewers" are then combined into a single figure expressive of the personality of the applicant.

Some of these fine quantitative determinations cited are of more importance than others but all must be combined into a single figure. This may be done by weighting the different figures according to their relative importance. The advantage of these different quantitative determinations and of the one summarized quantitative determination is that it makes it possible to compare these original estimates with later success. The adequacy or inadequacy of the parts of the test or of the whole system of testing can thus be accurately determined. In this way any particular test is eliminated if the prognosis based on that test fails to correspond to the later history of the worker. The chief advantage of the methods indicated above is not in having the right methods of testing to start with, but in having a method of handling results which make it possible to eliminate the unsuccessful factors in the test and strengthen those factors which are successful.

Thus far we have dwelt upon the interview as a source of information for the employer, but it ought by no means to end there. It is quite as important to everyone concerned that the applicant be fully informed about the prospective position. In nearly every case the interviewer is intent upon only one aspect of the situation, that of discovering whether the person before him has the necessary qualifications to fit the task. He is too frequently in a hurry, curt, even domineering. The situation is apt to be formal, strained, and the applicant self-conscious and bent upon making a good impression to the complete exclusion of any effort to inform himself as to the detailed requirements of the position. Even with older

persons and experienced employees the situation is quite sure to be bad enough, and in the case of young or inexperienced candidates its worst features are accentuated. By taking only a few minutes longer in the interview, a great deal of trouble and misunderstanding could often be saved for both parties.

Some of the most important topics that ought to be considered before the engagement of an employee is completed are contained in this statement from a very successful employment manager:

When an applicant is engaged, the requirements of the position he is about to fill are clearly outlined to him. For this purpose the job analysis is followed, so that every point which should interest the new employee is covered. On the subject of wages, care is used to underestimate slightly the probable earnings, so that the new employee is not misled by a too favorable outline of the job. He is informed concerning the hours of employment, of the advantages that come from steady work, and of the aims of our organization.

There are other questions of significance that the candidate may ask or that may be emphasized, but the clear comprehension of his duties are of primary importance.

The employment manager of a large publishing house mentions this point in a discussion of procedure in the interview:

Before any applicant for a prospective position is recommended, he must be told what the general nature of the work will be and given exact information regarding working hours, salary, and the possibility of advancement. He should be encouraged to ask questions about the work, and should not be recommended if he shows the slightest hesitancy in complying with the conditions.

Besides explaining the general character of the business to apprentices and inexperienced persons, there

ought to be a frank discussion of such matters as health conditions, safety, time required to learn the trade, the likelihood of the work taking them to other parts of the city or to other cities, social advantages both within and without the organization, and the opportunities for promotion.

Working hours will vary considerably in different localities and in various occupations. They are of importance in relation to the exhaustive nature of the work, the distance of the candidate's residence, his physical strength, family obligations, and plans for study and recreation. Especially likely to be misunderstood are the probability of overtime or lay-offs, and the arrangements for free afternoons and vacations.

A fair financial statement will include the starting wage, rate of increase in case the employee makes good, average earnings of employees in similar positions, and the opportunity for advancement to positions requiring greater knowledge or skill or involving greater responsibility. Such questions as the probable duration of the work if it is likely to prove temporary, expense charges for damage, loss and breakage, the policy of the firm in regard to giving references when the term of employment is terminated, are all of prime importance, and the candidate has a perfect right to be informed about them.

#### MEDICAL EXAMINATION

One of the significant facts brought out by the comparison of Groups I and II in the chart facing page 32 is that none of the firms without employment departments had instituted any form of physical or medical



examination of applicants. On the other hand, seven employment departments, over 38 per cent of Group II, had nurses and physicians in attendance and made a thorough examination of all prospective employees.

Although objection is frequently raised to medical supervision on the grounds that it is apt to arouse suspicion on the part of some employees and that many will refuse to apply on account of it, the experience of all the managers interviewed was decidedly in favor of it. One firm employing over 3000 men stated that during the year following the inauguration of medical examination only a half-dozen men had refused to take the examination. Of these there was no doubt that four or five would have been rejected by the physician. The majority of intelligent workmen are glad to take such an examination on account of the valuable information it gives them and because it brings them in contact with the physician to whom they will apply later in case of sickness or accident.

While the number of rejections is usually small, the proportion of those who need medical attention is certain to be quite large. From 20 to 25 per cent are likely to be found with definite diseased conditions, while the number who have had no adequate dental care may be as high as 90 or 95 per cent.

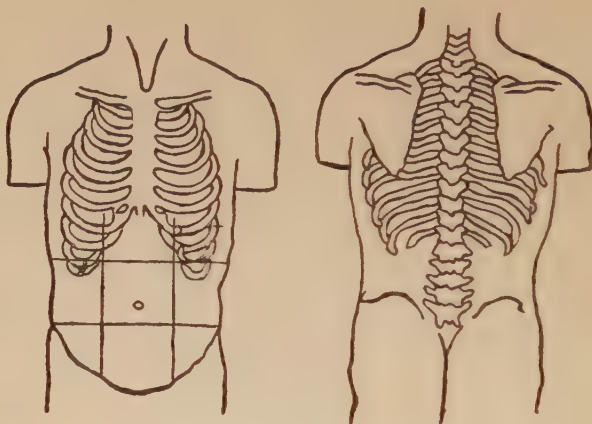
The blank used by No. 24 is reproduced in Form No. 8. This firm has a physician and one or more nurses in constant attendance. After the applicant has been passed by the interviewer, he is taken in charge by the physician's assistant who fills out the blanks at the end of the card used for the first interview (see Form No. 6) and makes the examination of eyes, ears, throat, etc. The physician is then called in to complete the examination.



HEALTH AND SANITATION DEPARTMENT			
Name		Age	
Address			
Dept.	No.	Date	
Gen. Appearance			
Eyes:	Vision Dist 10 Ft. $\begin{cases} \text{R-} \\ \text{L-} \end{cases}$		
Ears:	Hears Watch	$\begin{cases} \text{R-} \\ \text{L-} \end{cases}$	$\begin{matrix} \text{Inches} \\ \text{Inches} \end{matrix}$
Nose			
Throat			
Tongue			
Teeth			
Neck			
Chest Contour			
Heart			
Lungs			
Abdomen			
Extrem. $\begin{cases} \text{Upper} \\ \text{Lower} \end{cases}$			
Ing. Reg.			
G. U.			
Spine			
Skin			

## FORM NO. 8. MEDICAL EXAMINATION RECORD

Thin card, 5 inches wide and 8 inches high. For back, see page 88



Pulse

B. P.

Urinalysis

Color

Alb.

Ppt.

Sugar

Sp. Gr.

Microscop.

React.

Summary

FORM NO. 8. BACK  
For face, see page 87

Form No. 9 is a simpler form used by a large manufacturing concern. It is made out in duplicate, one copy being retained by the physician and the other returned to the employment office.

ORIGINAL
.....191.....
Dr. ....
Please examine bearer, ..... who has applied to this Company for employment as.....
.....
in its <sup>Factory</sup> <sub>Office</sub> , and report the result of your examination to us promptly.
<i>Signature of Applicant:</i>
.....
<i>Employment Dept.</i>
DOCTOR'S REMARKS:
No. 71802
<i>Signed</i> .....

**FORM NO. 9. SIMPLER FORM OF MEDICAL RECORD**

Thin paper, 5¾ inches wide and 4 inches high, perforated for folding, manifolding, and detaching

The experience of the firms that have been most successful with medical inspection seems to indicate that a very thorough examination is quite necessary. Dr. W. Irving Clark, Jr., of the Norton Grinding Co. of Worcester, Mass., says on this point <sup>1</sup>:

<sup>1</sup> *Journal of the American Medical Association*, Jan. 6, 1917, page 5.  
 “Medical Supervision of Factory Employees.”

We believe that the applicant should be completely stripped at some point during the examination and that as thorough examination should be made as in a general hospital on the admission of any medical case. We consider blood pressure a distinct advantage as an indication of possible trouble in the kidneys. This is especially valuable as a time saving device, being much quicker, and simpler than making a urinalysis of all cases. Our rule is to do blood pressure on every man over 20, to do urinalysis on every person under 40 who has a systolic pressure of 150 or over, or a diastolic of 100 or over. All men over 40 years have a urinalysis regardless of their blood pressure.

Among the chief reasons for rejections are: 1, Contagious diseases of various sorts, such as venereal disease, tuberculosis, and skin or eye diseases; 2, Physical unfitness not of a contagious nature, as rupture, eye or ear trouble, defective teeth, flat feet, varicose veins, hernia, chronic cases of headache, neuralgia, or stomach trouble.

The number of rejections will depend upon numerous variable factors, such as the condition of the labor market, the nature of the business and the character of the work, the health and compensation laws of the State, health standards set by the firm, and the personality of the physician in charge. From 3 to 5 per cent rejected is a fair average among the firms which are making medical examinations.

Among the advantages to be derived are those enumerated below.

1. Candidates who are manifestly unfit are rejected at once, thus saving the company the expense of training them and later replacing them.
2. Employees and patrons are protected from contagious disease.
3. Doubtful cases can be followed up closely and



Central Hospital, The Norton Company, Worcester, Mass. This, with four sub-hospitals, takes care of all accidents and minor illnesses of employees while on the job





minor ailments or defects remedied before they become acute.

4. A combination of the job analysis with medical examination opens the way to placing employees to better advantage and makes it easier to transfer to other departments those whose health unfits them for the work they are doing. Several companies have proved that with careful placement and close supervision it is possible to retain employees with grave physical defects without extra hazard in accidents.

5. Indigestion, headache, neuralgia, and other complaints resulting from defective teeth are reduced in number, thereby reducing tardiness and absence.

6. Accidents due to defective hearing and vision are lessened. Claims for injuries received in some previous place of employment can be readily disproved.

7. Raising health standards is sure to result in a more efficient, better contented working force. The employee as well as the company profits by an endeavor to determine in advance the probability of the applicant being able to meet the adverse conditions imposed by the task.

#### PSYCHOLOGICAL TESTS

Only three of the thirty firms tabulated, or 10 per cent of the total number, were making any use of psychological tests. No. 15 was very much interested in the development of psychological aids to selection and had tried out three simple tests with varying degrees of success. All the tests which he had used were selected to measure some one highly developed function. While he was quite sure that at least one of the tests had been of value, he did not feel that his work

had progressed beyond the early experimental stage. He was continuing and extending his experiments.

No. 17 had made use of general intelligence tests with two purposes in mind: (1) As a check against the original placement of mentally deficient persons on work for which they are unfit; (2) to prevent the promotion of persons to clerical or executive positions who are intellectually unequal to them. Emphasis is laid upon the fact that the tests are designed and are relied upon merely as one means of discovering the individual's limitations.

The reply of No. 13 is quoted in full:

It is an injustice to call these tests psychological. Common-sense practical tests for determining relative mental ability of applicants would be a much more logical name for them. There is a tremendous difference between psychology and phrenology and many is the phrenological crime committed under the mask of psychology. We are using a system of tests covering the following general headings:

1. General intelligence
2. Imagination
3. Word building
4. Trabue or sentence completion
5. Card sorting
6. Inventive ability
7. Mechanical ability
8. Standard "A" test for quickness of perception and motor co-ordination
9. Mathematical ability
10. Group judgment, or the judgment of a class of applicants by each individual member.
11. Complete physical examination
12. Five minute interviews by several interviewers who rank independently according to their own judgment of applicant's ability.

This gives a fairly comprehensive result as far as the test is concerned, and this test result is correlated with the tabu-

lation of interviewers' judgment. All tests of this nature are to-day in an embryo stage, and it is improbable that they ever could be, or should be, considered as final estimates; but our practice has proven conclusively that the tests used here are a very valuable aid to judgment of certain mental capacities in the selection of high grade employees. We have made no attempt to use these tests on the rank and file of mill operatives, and perhaps have found them most useful in the case of applicants for clerical, sales, efficiency, and executive work. We can certainly state that within the scope for which we use them they are extremely helpful, but I wish to emphasize the fact that in the use of all such mediums by which to aid the judgment in the selection of employees, the most important requisite is the continual use of plain common-sense in very large doses.

A majority of the writers on this subject have been willing to admit, as did Dr. Hugo Münsterberg, that "completed investigations do not as yet exist in this field," but the sanguine tone of their reports coupled with the natural desire of employers to find quicker and surer methods for selecting workers has led to a great deal of misplaced faith in the utility of psychological tests and experiments.

The following points ought to be very carefully considered by any firm that contemplates the introduction of methods of this sort.

1. Aside from modifications of the Binet scale for determining mental ability, there are no tests which have been tried on a sufficient number of individuals to give standards that are in any degree trustworthy. Even the modified Binet standards are not to be depended upon for persons over 15 years of age.

2. Better methods of securing standards must be devised in order to obviate errors arising from chance samplings. Because of the small number of individuals examined, it is likely that many of the proposed

tests fail to cover the full range of the abilities or qualities tested.

3. The low percentage of correlation between the

M.....

Dear.....

M..... has applied to us for a position as..... and refers us to you. Will you kindly write us how long you have known the applicant and in what relation, and if you consider h..... honest and of good habits. We should like also to have you give us the names and addresses of any persons for whom the applicant has worked, as this will enable us to judge the applicant to better advantage.

Thanking you in advance for your courtesy and assuring you that your reply will be treated as strictly confidential, we remain

Yours very truly,

Per.....

Remarks.....

Signed.....

FORM NO. 10. INQUIRY USED BY A DEPARTMENT STORE  
Original is printed on a regular letter sheet, 8½ by 11 inches, bearing the  
company's letterhead



results of tests so far proposed and the success of individuals in the occupations implies that injustice is certain to be done in many cases, if the standards set

M.....	.....191.....
Dear.....	
<p>M..... has applied to us for a position, giving your name as that of a former employer. It is necessary for us to verify the applicant's personal character and record of time. We shall appreciate, therefore, an answer to the questions below at your earliest convenience, and assure you that your reply will be held strictly confidential, and that we shall be glad to reciprocate at any time.</p> <p style="text-align: right;"><i>Per</i>.....</p>	
<p>Data regarding employment with you.</p> <p>Department.....</p> <p>Worked under.....</p> <p>Entered your employ?..... Habits good while in your employ?.....</p> <p>Left your employ?..... Strictly honest in every way?.....</p> <p>Position filled?.....</p> <p>Discharge or resigned and why?.... Name other places where applicant ..... has worked?.....</p> <p>Work satisfactory?.....</p> <p>.....</p>	
<p>Additional Remarks:.....</p> <p>.....</p> <p>.....</p> <p style="text-align: right;"><i>Signed</i>.....</p>	

FORM NO. 11. INQUIRY USED BY A DEPARTMENT STORE  
Original is printed on a regular letter sheet, 8½ by 11 inches, carrying  
the company's letterhead

are applied indiscriminately and without the exercise of careful judgment.

4. Results from the tests now offered cannot be successfully interpreted by persons who lack a wide experience in psychological methods. Their use ought

Principal of.....	.....19
.....	
Dear.....	
<p>M.....of.....has applied to us for a position stating that he attended your school in..... Will you kindly answer the questions on the other side concerning h and also give us any other information that may be of value to us. Thanking you in advance for your courtesy and assuring you that your reply will be held strictly confidential, we beg to remain,</p> <p style="text-align: right;">Yours very truly,</p> <p style="text-align: right;">Per.....</p>	
Form S 360	

FORM NO. 12. INQUIRY FORM USED BY A DEPARTMENT STORE  
 A thin paper slip, 8½ inches wide and 4½ inches high. For back, see opposite page

not to be recommended indiscriminately to employment managers who are not fully prepared to carry on work that still partakes very much of the nature of research experimentation, and who lack the training in statistical methods required for the interpretation of results and the compilation of new standards.

5. The best psychological tests so far devised seem

to be those which create situations as nearly as possible like the actual shop task.

For a further discussion of psychological tests see our notes on Ayers, Hollingworth, Kitson and Münsterberg in the Bibliography, Chapter XII.

General Health.....
Personal Character.....
Home Influence.....
Associates.....
Rank in Scholarship.....
Best Branches.....
Inclination for any Special Line.....
Did he Graduate.....
Time of Leaving or Graduation.....
Additional Information.....
<i>Signed</i> .....

FORM No. 12. INQUIRY FORM USED BY A DEPARTMENT STORE  
 Back. The tabulated items facilitate the work of answering the inquiry.  
 For face, see page 96

#### REFERENCES

Thirteen of the thirty firms under consideration (43.3 per cent) considered it advisable to follow up references of former employers or other persons named by applicants. As a rule, both superintendents and

employment managers seemed to feel that unless the applicant had been dishonest he was very likely to receive a fair recommendation from former employers. For this reason they attached but slight importance to the value of such references. Personal interviews or telephone calls were regarded as more valuable. In any case too much reliance on previous industrial records is dangerous, as it frequently happens that a man who has had an indifferent record or who has been a complete failure in one plant proves himself entirely capable in a new environment. The success that has followed the policy of transfer of employees to other departments within the organization is conclusive evidence of the fallacy of selection based largely upon an individual's work record in another firm.

Reports from schools and colleges are likely to over-emphasize the importance of academic standing and to lose sight entirely of the personal fitness of the person for the task or for the organization.

As the work of vocational guidance in schools develops, and as better records are kept in employment offices, the value of references will undoubtedly increase. The Fourth Annual Report of the National Association of Corporation Schools states:

The life history of an employee as time goes on proves to be of the greatest service in many ways. Men are far more careful when they know they are being systematically and justly checked. Much waste in this way is prevented. When it becomes known that each weakness is evident, a wholesome, preventive check is established with reference to many forms of waste, friction and injustice.

Among other things, these service records, developed by a well trained employment staff, will contain much valuable information regarding the different aptitudes of the employees. Hence such bureaus are capable of doing a great deal by way of helping employees choose the right lines of

work. This is fundamental in an organization that is trying to build up a stable, effective work force, and is absolutely essential to efficiency in the case of youth. These records aid greatly in free, wise choice of vocation.

Forms Nos. 10, 11, and 12 are used by a large department store for following up references. They are multigraphed on the firm's letter head.

#### ADVANCE NOTICE OF POSITIONS

It seems important to point out in conclusion that every scheme of selection fails of its intended object unless the employment department can have advance notice of positions to be filled. Cases are certain to arise where hurry calls for additional help must be sent in, but the majority of such requisitions can be avoided, especially in small establishments, by systematic effort. Planning for labor and estimates of the number and kind of new employees ought to be just as well provided for as are estimates of raw materials, new machinery, or building repairs. Having analyzed the tasks and with adequate data at hand concerning the number and type of workmen needed, the employment manager can proceed to develop the proper sources of supply and build up his prospect files. Only after having eliminated the greater portion of its hasty and haphazard selections, promotions, and transfers can the department begin to rely upon the interpretation of its records for the choice of successful methods.

FOREMAN'S EFFICIENCY RATING FOR YEAR 1916		
Name.....	Works.....	
Position.....	Dept. ....	
Annual Salary, \$.....	Maximum Bonus..... \$.....	
	POINTS	
	Maxi- mum	Recom- mended
1. Production Costs	15	
2. Quality of Product	10	
3. Production Output	10	
4. Reduction of Spoiled Work	10	
5. Saving of Material and Supplies	8	
6. Suggestions for Improvements	8	
7. Organization	7	
8. Maintenance of Discipline	7	
9. Services Rendered Other Departments	5	
10. Stability of Labor	5	
11. Condition of Department and Equipment	5	
12. Planning and Close Attention to Schedules and Orders	5	
13. Reduction of Serious and Lost Time Accidents	5	
14. Efficiency of Nonproductive Men		
	100	
Allotment.....% of Maximum \$.....		
Remarks.....		
Date..... 191.....	Approved:	
	..... <i>Superintendent</i>	
This Space Reserved for General Office		

FORM NO. 13. FOREMAN'S EFFICIENCY RATING.  
USED AS BASIS FOR ALLOTMENT OF BONUS FOR EACH FOREMAN.  
Original on thin white paper, 8½" x 11".



## CHAPTER VII

### INITIATING WORKERS INTO THEIR TASKS, AND THE GENERAL EDUCATION OF EMPLOYEES

**F**REDERICK W. TAYLOR'S requirements for the selection and training of workers are clearly stated and theoretically sound, but only in rare instances has much been done toward realizing his ideal. He demands that the firm employ "a corps of competent specialists whose duty it is to instruct and train the workers and to assist them whenever difficulties arise in connection with the work," and to set for each man "the highest task for which his physical and intellectual capacity fits him." He requires that the workmen learn and perform "not one merely but several operations or tasks" and that opportunities be opened up for the advancement and promotion of workers. If followed out, his plan would constitute a very "practical system of vocational guidance and training" and would, as he expects, while accepting "the modern tendency toward machine production, . . . mitigate its possible evil effects upon the workers."

Mr. Hoxie in a recent report to the United States Commission on Industrial Relations, after investigating thirty-five factories under scientific management, says:

Nowhere did the writer discover any scientific or adequate methods for adapting the worker to the task. Scientific management shops, in general, depend upon nothing in the way of general occupational adaptation of the workers except the ordinary trial and error method. The employment of a special corps of instructors is by no means universal in scientific management shops. In some, no instructors were found, but new workmen were forced to depend entirely upon fellow workers and old line foremen for any assistance and training which they might receive. Where special instruction was given, it ranged all the way from careful initial training and, thereafter, friendly supervision, suggestion and assistance, down to a few hours or moments of preliminary teaching and observation, after which the worker was thrown upon his own resources.

Mr. Hoxie's description will answer very well for many of the firms visited in the vicinity of Boston. Sixteen of the group of thirty under consideration leave all instruction to the foremen and their assistants. The following is a typical reply: "New employees are assigned to departments and report direct to foremen who arrange for their time cards, assign them to lockers, and show them the work to be done."

Only one superintendent of the sixteen claims that he regards instruction as the chief function of his foremen. In this instance the foremen are selected because they know the work thoroughly and are able and willing to teach others, rather than for their ability in securing adequate output.

Eight superintendents say that experienced workmen impart such information to new employees as will enable them to enter upon their duties. These workers are not always selected upon the basis of teaching ability, and usually devote only a small portion of their time to instruction.

In one factory the duties of each new employee are

outlined for him by the employment manager. He is then expected to acquire the actual methods of procedure from the person in charge of the work or from an assistant. There was no intimation that assistants or foremen were especially chosen or were well fitted for the work of instruction. In striking contrast with such haphazard methods, are the plans which have been developed in organizations where education is regarded as an important function of those who control the general matters relative to personnel. In many firms systematic educational work has been conducted for years, but its fullest value has never been realized until there was opportunity to check up efforts in this direction with other important problems.

The highly functionalized and thoroughly effective employment department is capable of correlating this work with other of its functions in many ways, the most important of which will appear in the examples here noted.

Fourteen of the firms visited have special instructors or training schools for their employees. A large publishing house that has developed a very complete plan gives the following description of its educational work:

Detailed instruction is given by a foreman or supervisor, oral or written in accordance with the amount of detail to be learned. There is an apprentice school for printers with a well defined plan of promotion.

Three good sized rooms, well lighted, compose the quarters of our instruction division. Most of our work at the present time is done departmentally. The classes conducted under our instruction division are purely voluntary. A salaried teacher is in attendance who has a regular schedule of lessons. Classes in stenography and touch typewriting are very popular. Also, under the auspices of the Country

Club, classes are held in English, commercial geography, business mathematics, penmanship and spelling. (The Country Club is an organization maintained and managed by employees of this publishing company.) Inasmuch as these classes are voluntary, it is particularly gratifying that their popularity is increasing all the time.

About eighty of the boys in our employ are under sixteen years of age, and are on this account subject to the new child-labor law, which requires them to attend school eight hours a week. We have co-operated with the school authorities by placing one of the rooms in the instruction division at their disposal. Here a teacher furnished by the school board holds classes three days a week.

Our apprentice school for compositors is rather a unique organization, conducted under the direction of the manager of our composition division where the type is set for all our publications. The school is maintained under competent instructors, and here, through a course of five years, boys are developed from raw beginners into finished compositors. It is here we recruit our compositors when they are needed. The compensation paid the boys during their five-year course increases every six months.

We consider it to be the duty of our employment department to develop the efficiency of the workers, directly or indirectly, and to bring about a condition in which the individual employee will render as nearly as possible 100 per cent to his employer. The word "employ," therefore, should signify the care and development of the employees rather than the mere act of engaging workers and placing them on the payroll.

A manufacturer of men's clothing reports as follows:

Their responsibilities and the responsibilities of the organization to them are explained to new employees by the employment head. They are then turned over to the superintendent of instruction and a trained instructor given charge until satisfactory progress has been made. All matters of time keeping and payroll are explained to them by the head of the payroll department. New employees also become acquainted with the manager and other heads whom they may have contact with.

Three manufacturers employing a large number of women and girls were visited who maintain separate training departments. New employees are sent to this department for preliminary instruction, or are placed in charge of an instructor in the department to which they are assigned. One firm in this group has a carefully planned series of simple tasks upon which employees are tried out when they first enter the organization. A point is made of starting women and girls on slower machines, and only those who show good control are advanced to more rapid work.

A large firm manufacturing boxes, tags, and printed specialties has in operation a very satisfactory scheme of training. By maintaining a division separate from the actual manufacturing departments, foremen are relieved of the trouble and expense of breaking in new help, and the necessary information and skill are acquired in less time than it would otherwise take. A very important function of the instructors is to pass upon the vocational aptitudes of their students. Some one hundred and fifty different occupations are represented in the factory, many of them found only in this industry, that may be undertaken by persons who were entirely unskilled at the time of entering the organization. With so many possible channels for endeavor open, careful training and later follow up in the manufacturing department offers the best method of wise placement.

The employment department of this firm follows up the new employee quite closely for the first three months. If he proves to be successful on the job, his wages are advanced in due time. Monthly recommendations for advance in pay are received from department heads. These are checked up with a record of



each employee, on file in the employment office, which shows his name, age, rate of wages, length of service, number of suggestions, number of errors, and previous record in the training school. The pay recommendation takes effect upon approval by the employment department and the works manager. If it is not approved by the employment manager, reasons for refusing an advance are sent to the works manager, who does not give his final approval without additional investigation and further proof from the department head of the worthiness of the case.

The General Electric Company maintains apprentice schools at each of its extensive works in West Lynn, Mass., Pittsfield, Mass., Erie, Penn., and Fort Wayne, Ind.

For young men sixteen years of age and over who have a grammar-school education or its equivalent, courses are open which prepare for the following kinds of work: 1, Machinist, tool and die maker (four-year course). 2, Pattern maker (four-year course). 3, Moulder (two-year course).

Practical training in the shop is correlated with instruction in the apprentice school in mathematics, elements of mechanics, power transmission, strength of materials, chemistry of common metals, business English, industrial history, and mechanical and free-hand drawing related to the course followed. Elementary electricity is included in the list for machinists.

High-school graduates may take any of the above courses, the period of apprenticeship being shortened for them from one to two years, or any of the following: 1, Draftsman (three-year course). 2, Electrical tester (three-year course). 3, Technical clerk and cost accounting (two-year course).



Grammar-school applicants are passed upon by the superintendent of the apprentice school, while high-school graduates are admitted by a committee of five composed of the general superintendent, the supervisor of instruction, the superintendent of the testing force, and a machinist. All applicants must pass a physical examination.

After a trial period of about two months, during which time they receive a regular compensation, acceptable candidates may sign the standard apprentice agreement which outlines the length of the course, rate of pay, etc. Each apprentice receives from \$50 to \$100 cash bonus when he satisfactorily completes his course, the amount depending upon the nature and length of the course. Graduated apprentices are encouraged to remain with the company so far as employment conditions admit.

In this school the shop work is conducted in a large, well equipped machine shop set aside for the purpose. Under the guidance of a corps of special instructors, the boys are put at once on commercial work. Safety, the elimination of wasteful methods, and the gaining of speed and accuracy, are emphasized. As a rule the boys work in pairs, the one who has been on the job for some time helping an untrained apprentice until the latter gains sufficient skill and confidence to take on a third pupil and allow his teacher to progress to another machine or a different kind of work.

For high-school graduates, such a system of training offers many advantages. A large company can afford to maintain an equipment and a corps of instructors far in advance of that within the reach of any public school system at present. Class-room work is vitalized by immediate application to shop practice,

and the boy's interest is further held by the fact that he feels himself a factor in the company's productive forces. For boys who have had only grammar-school training, there are certain decided disadvantages. The corporation school is frankly managed to increase production, and until we have a new point of view controlling the supervisor of personnel and influencing apprentice-school policies, there are sure to be grave discrepancies in the training offered. A committee reporting to the National Association of Corporation Schools at their third annual convention in 1915 listed the subjects taught, or believed suitable, by twenty firms conducting apprentice schools. A classified list of the subjects which they name reveals not only a wide diversity of practice but a serious lack of instruction in certain directions. See page 109.

Doubtless such topics as safety and hygiene were dealt with in other ways by these companies to their entire satisfaction. It is impossible, however, to avoid the implications of the relatively small numbers offering courses in history, civics, shop economics, English, and elementary science. It is only fair to assume that a majority of the firms in this list hired a considerable number of foreigners who were not familiar with the English language, and that many of their employees had enjoyed no more than a common-school education. Where such conditions obtain, a further development of opportunity by the local public schools appears to be the only adequate solution offered.

A small number of firms have made night-school attendance compulsory for all their non-English-speaking employees. Others have announced a preferential policy with respect to night-school students by which those who were in regular attendance were to be con-

TABLE I

SUBJECTS OF INSTRUCTION OFFERED OR RECOMMENDED BY  
TWENTY CORPORATION SCHOOLS. 1915

(Adapted from the Report of the National Association of  
Corporation Schools, 1915)

Subject	Number of schools offering it	Subject	Number of schools offering it
Mechanical Drawing.....	14	History .....	2
Applied Arithmetic.....	10	Spelling .....	2
Algebra (usually only formulas) .....	7	Shop Spelling .....	2
Applied Geometry .....	6	Elementary Electricity... 2	
Applied Mechanics .....	6	Reading Working Draw- ings .....	2
Shop Mathematics .....	6	Economics .....	2
Business English .....	6	Hygiene .....	1
Physics .....	5	Reading .....	1
Freehand Drawing.....	5	Business Forms .....	1
Shop Methods .....	4	Elementary Science.....	1
Trade Mathematics.....	4	Strength of Materials.....	1
Civics .....	3	Industrial History.....	1
Trigonometry .....	2	Shop Organization.....	1
		Safety .....	1

TABLE II

NATURE OF BUSINESS OF ABOVE FIRMS

Manufacturing Iron and Steel Goods, Machinery and Auto- mobiles .....	9
Printers and Publishers.....	3
Railroads .....	3
Specialty Manufacturing .....	2
Marine Construction .....	2
Chemical Manufacturing .....	1

sidered first in promotion and held longest in case of lay-offs.

The Cadillac Company of Detroit has worked on a program intended to popularize the idea of attending English classes. The leaders were interested first, and they in turn worked with the rank and file in the shops.

It is often possible for firms to co-operate with the local board of education in offering courses in English and citizenship. The expense of text books and instructors is paid from public-school funds and the company furnishes a room, heat, light, etc. Classes are frequently conducted by the Y. M. C. A. and other organizations under a similar agreement.

A bonus system by which one or two cents an hour increase in wages is paid to foreigners attending night school, the encouragement of naturalization, and English classes conducted within the shop at the expense of the company, are other plans that are being tried by large corporations.

Experience has everywhere demonstrated the futility of evening classes for minors. No principle of industrial education is more firmly established than that which demands time during working hours for the instruction of young workers. Something can be accomplished for adults through evening classes and correspondence courses, but for the vast majority of workers these means are ineffective. The strongest argument against them based on the likelihood of reduced physical vitality, rarely offset by higher efficiency, ought to come from those interested in production.

Where the factory is a large one and has in its employ a very considerable percentage of the population

of a city or well defined district, much can be accomplished through co-operation with the public schools. The following item taken from "The Fore River Log," a journal published by the employees of the Fore River Ship Building Corporation, shows the interest taken by that firm in the advantages offered by the public schools.

Free instruction is offered ambitious men in the various trade subjects, for which classes will be established as in the past year under the direction of the superintendent of schools. The classes will be held in the Quincy Industrial School on Phipps Street, and if the registration is sufficient will be offered instruction in the following subjects:

- Drawing and blueprint reading for machinists.
- Drawing and blueprint reading for plumbers.
- Drawing and blueprint reading for electricians.
- Sheet-metal design.
- Mold-loft work.
- Naval architecture.
- Monumental design.
- Carpentry and stair building.
- Shop mathematics.

Other courses will be established to meet the demands of applicants. The courses are open to all employees of this company, young or old, and it is not required that they shall be residents of the city of Quincy.

The Fore River Ship Building Corporation supplements this instruction by courses in an apprentice school within the plant.

As an example of the willingness of a State board of education to co-operate in such matters, the educational survey of the city of Framingham, Mass., recently undertaken for the purpose of outlining new school policies which will consider the needs of the Dennison Manufacturing Company, can be cited. A representative of the board of education conducted an



exhaustive investigation and made recommendations for numerous educational readjustments intended to meet the needs of the large number of young people who annually enter the employ of this firm.

The New England Shoe and Leather Association arranged to co-operate with the Boston School Committee in 1910 in establishing the first shoe and leather continuation school in the United States. The report of the Committee on Industrial Education of the National Boot and Shoe Manufacturers' Association, given at the annual convention in New York on January 13, 1915, in reference to this school, reads in part:

The first class brought together numbered thirty-nine pupils, representing twenty-nine different concerns in various branches of the allied shoe and leather trade, mainly boys and young men between the ages of fifteen and twenty, employed in offices, warehouses, manufacturing departments, etc., of the shoe factories, tanneries, and other establishments. Since that time there have been graduated from this school more than two hundred pupils, each of whom has received an official certificate of his technical ability, and in this way there has been laid a splendid foundation for the larger scheme of industrial education that is now being considered by the Association.

The working method of this Boston Shoe and Leather Continuation School Class, briefly, is the holding of a series of two-hour sessions on two afternoons a week, covering a period of twelve weeks.

The school committee provides the class room and the instructor, who, of course, has specialized in this particular branch of industry; and the Association and the trade it represents co-operate by furnishing competent lecturers, and other experts, who from time to time give the pupils formal or informal talks on the subjects in which they are experts.

Incidentally various trips of inspection are made to nearby shoe factories, tanneries, and other plants, the result being that the boys not only acquire a broad idea of the fundamentals of tanning and shoemaking, together with its ramifications of foreign-trade extension, advertising, and general



efficiency, but, what perhaps is as important as anything, they graduate with an interest and enthusiasm for their chosen vocation that will mean more than half the battle for them in their future life.

There is no charge for tuition in the Boston Shoe and Leather Continuation School, except that non-resident pupils are charged a nominal fee, so that the only expense entailed is the four hours or so per week of the pupil's time that the employer donates to the good cause.

Although this continuation school has rendered excellent service, it by no means takes the place of other instruction which ought to be offered in the factory. The only large shoe concern visited has an apprentice school of its own within the plant.

The city of Beverly, Mass., offers an important instance of the "part-time" plan for the education of machinists. In 1909, following the report of a commission on industrial education which carefully examined the leading industries of the vicinity with a view to training for the more important kinds of work, a State-aided industrial school was established in co-operation with the United Shoe Machinery Company. The school now gives opportunity for the enrollment of about fifty boys. They work in two divisions, alternating each week between school and shop work. Each division is assigned to a machinist instructor who continues with it in both school room and shop. In this respect the school is unique among industrial schools, since the arrangement insures the retention of the practical viewpoint of the shop by the instructors and provides a very close correlation between factory and school room.

The factory provides and equips the workshop and a demonstration room in which the construction and operation of machines is taught, and pays for the time

of the instructors in the factory. It credits the school with all completed work put out by the shop that passes inspection. Half of this amount goes to the boys on a piece-work basis, and the other half is placed in the maintenance fund.

While shop work is emphasized, the training is definitely planned to fit for useful citizenship. The boys study mechanical drawing, machine designing, shop mathematics, electricity as applied to machinery, chemistry of materials, business and social forms and practices, hygiene, and social and civic duties. In the shop the allotment of time on the various machines is such as to develop all-round machinists.

None of the boys are indentured as apprentices, but those who complete the course successfully are given a chance to enter the employ of the United Shoe Machinery Company on full time at regular piece-work rates. The full course may be completed in two years or less, if the boy is of unusual ability, or as much more time may be taken as is necessary.

Management of the school is vested in a board of trustees consisting of the mayor of Beverly, five members of the Beverly school committee, and a representative of the United Shoe Machinery Company. This representative is an official who is in close touch with the employment department. Their acts are subject to the approval of the State board of education. There is also an advisory board consisting of a member of the United Shoe Machinery Company, one foreman, one journeyman, one outside mechanic, and a citizen.

Results have been highly satisfactory to all parties concerned. In the first five years, the city of Beverly invested \$14 000 in equipment and maintenance. In 1914, one year only out of the five, students attending

the school earned the equivalent of an annual interest of 21 per cent on this amount.

High testimony to the worth of the school is to be found in the fact that more than two-thirds of the membership come from homes where the father works in the factory. It is also significant to note that, although it is not an entrance requirement, the large majority of applicants are high-school graduates.

Some of the most advanced ideas on education and many of the best conceptions of the relationships which should obtain between the employment department and the department in charge of instruction where these two are separate are incorporated in the methods of a well known department store in Boston.

The training of all sales people is in the hands of the educational department. Other junior positions are handled by the executive in the department, and executives are initiated into the system by the employment supervisor.

New additions to the sales force are turned over to the education department where they are instructed in the rules of the store and its general policies before beginning their work. Each employee receives copies of booklets containing the store rules and a sketch of the organizations supported by employees. Regular instruction of the sales force is carried on through executives and floor superintendents. In the educational department, efficiency bulletins are formulated from time to time on questions of policy or methods which apply to all departments. Material for the bulletins is drawn from executives, from the research department, and from suggestions from employees.

At 8:30 in the morning, each floor superintendent gathers the members of his department together for

a conference on the subject matter of the bulletin. Whenever it is possible, the director or a representative of the education department attends these meetings, taking part in the discussion and offering suggestions. The following are titles chosen from the list of recent bulletins:

“Merchandise Calls”: “Service to Employees”: “Talk Merchandise, Not Price”: “Summer Visitors”: “New System of Special Orders”: “Promises”: “Errors in System”: “Educating the Public”: “Working Together”. An example of such a bulletin is printed on page 119A (Efficiency Bulletin No. 230, April 10, 1916). The members of the department are expected to sign the bulletin before it is returned to the education department. By checking up occasionally with the list of employees, the education department keeps tab on attendance at these conferences and can look up absentees.

By an arrangement with the Boston school committee, branch classes of the continuation school have been held in the store for several years. Attendance is entirely voluntary, since all employees are over sixteen years of age, the compulsory attendance limit. The city furnishes an instructor and the store provides a room and the necessary equipment. Courses are offered in textiles and salesmanship, meeting for two hours a day, four mornings a week.

In addition to these courses, a group of those who have been recently transferred to the sales force is formed every few months for an elementary course in the coloring and design of textiles. For more mature salespeople, a three-months' course giving a very complete study of textiles is offered. Attendance on this course is entirely voluntary.







Rest Room and Library, Wm. Filene's Sons, Boston, Mass.

## EFFICIENCY BULLETIN

No. 230

April 10, 1916

[SIGN IN MARGIN]

## WORKING UNDER PRESSURE

When business is as good as it has been recently everyone in the store is naturally working under pressure. We find that we have our hands full in trying to see that customers have the proper service. Selling seems so important that we are very likely to neglect other things.

During these very busy days, more than at any other time, it is important that the other parts of our work shall have proper attention. Customers must always come first but by giving a little extra thought to the rest of our work we shall be able to accomplish a great deal and save time and effort in the long run.

## STOCK KEEPING

One of the great dangers in a rush time is that the stock will get into very bad condition. It is impossible to prevent this altogether but if every one in the department is trying to keep the merchandise in good condition the damage will be much less than if we put all the responsibility on one or two people. We cannot neglect customers to put away stock but very often we can put one piece of merchandise back in place as we take another out. It is better to KEEP our department in condition as we go along than to stop and PUT it in order once or twice a day. Attention to stock-keeping will save time and trouble. It will also keep our merchandise in salable condition. We shall not lose sales because our stock is in such bad condition that it loses all attraction for customers or because we cannot find it quickly and easily. Even where there are a number of stock people in a department the salespeople must do their part if things are to run as smoothly as they should.

## SELLING THE RIGHT THING

Let us remember, too, that at this time good salesmanship counts for more than when it is quieter. THINGS THAT ARE NOT PROPERLY SOLD WILL COME BACK. Let us avoid every possible return. If we do so, we shall save

time, our merchandise will be in better condition, and we shall have more complete lines to show. Even if it takes a little longer to satisfy a customer it is worth while to give the extra time rather than have her come back later for a return or exchange.

#### SERVICE

If we are selling under pressure, customers are also buying under pressure. They will appreciate good service now more than at quieter times, and will go to the store where they can get it. Any one can give good service when he has plenty of time. The really worth-while people are the ones who can do their best under such pressure as we shall have during the next few weeks.

During the winter of 1915-1916 a course of fifteen evening lectures, open to all members of the organization, were given on economic theory and special problems of merchandising and advertising. The lectures were given by Harvard professors and by store managers, and although a small fee was required, the attendance was gratifyingly large for the full course.

On the basis of findings by the research department, new educational work is being undertaken. One person has now been delegated to the task of correlating the efforts of the employment, education, and research departments. This experiment is comparatively new, but the results so far attained are very promising indeed.

By filing in the employment department the records of students in the different classes, they become a part of the efficiency rating of each employee.

The New York Edison Company has carried to a high point of development this matter of correlating education with efficiency rating. We quote from an article by Arthur Williams of this company appearing in the *Annals* for May, 1916:

The Commercial Schools are conducted within the Company's time and at the expense of the Company. Enrollment and attendance are compulsory. Classes meet weekly, and every alternate week there are written examinations based upon questions distributed before the lectures. At the end of the year the student must have a rating of 75 per cent to pass, or falling below that point he must re-enroll and begin all over again. If he gets what is called the "C" rating, which is between 75 and 82 per cent, a special course of instruction is taken through the summer, with a later examination in the autumn, when it is expected that the student will have gained at least a "B" or possibly an "A," the highest rating the company school gives.

If he still has no higher than the "C" rating, so far as the school courses are concerned, the results are considered of an unsatisfactory nature. But the student has an opportunity at any time, through a course of study and examinations, to improve his rating and this opportunity continues so long as he is in the employ of the company. The results of the school course become a permanent part of the student's record, influencing his position and salary to a certain extent, but not in any final sense. There have been instances in which the school record is exceedingly poor, but the service of the employee as a whole of a very high and valuable order,—and this after all is the end desired.

Of the more general means of training such as libraries, trips to other firms, employees' clubs and associations, bulletins, periodicals, lectures, conferences, etc., very little need be said here. Policies in such matters will depend largely upon the requirements of the individual organization. Needless to say, the progressive employment manager will be keenly alive to possibilities in all these lines and will readily adapt his methods to fit the needs of the working force.

Provision for training executives is necessarily a vital part of every complete system of industrial education. The plans outlined in this chapter tend as a rule to develop good workmen, but they cannot be expected to produce leaders automatically. All the



firms in Group II (page 32) and with few exceptions those in Group I in replying to question 9, part IV of the questionnaire, "How are the various grades of executive and supervisory positions filled?" indicated that they depended almost wholly upon promotion from the ranks. Only a relatively small number, however, were paying particular attention to the problem of training executives. The more important elements in the educational schemes of these firms are alluded to elsewhere. The following are noteworthy efforts to provide adequate training for leadership in various parts of the United States:

1. The "Three Position Plan of Promotion," outlined by Frank B. and Lillian M. Gilbreth and introduced by them in a number of establishments, "considers each man as occupying three positions in the organization, and considers these three positions as constantly changing in an upward spiral, as the man is promoted." Each worker teaches a man in the position he has just left and is at the same time being instructed in the duties of a third worker who occupies the position next in line of advancement. Each employee is thus at the same time an instructor, a worker, and a student. The time that he must take to move to the next point in the spiral depends upon his ability to develop efficiency in his pupil and his own aptitude in learning the duties of the next higher position.

2. The "Flying Squadron" plan used by the Good-year Tire and Rubber Co., trains picked men to fill positions as foremen and executives. Courses are offered in mechanical drawing, economics, English, shop management and rubber manufacture. Opportunity is given to study various parts of the plant.

3. Wm. Filene's Sons Co., in their large department store in Boston, allow promising college men to spend a short time in each department in order to become familiar with the work of the whole organization. Special opportunities are given for instruction by the education department for those who elect such a plan.

4. The understudy system has been in use for many years by railroads. Each executive selects one or more individuals who are trained to succeed him. This plan has recently been adopted by the Fore River Shipbuilding Corporation in all its departments.

5. Special Y. M. C. A. classes for foremen have been formed in Cambridge, Mass. The University of Minnesota offers evening classes for foremen and superintendents. The Bradford Durfee Textile School at Fall River, Mass., has an evening class for superintendents and foremen in the selection of raw material and cost computations.

6. The American Telephone and Telegraph Co. maintains a normal school for the training of teachers for their telephone operator schools, and for the preparation of courses and lesson plans.

One of the great benefits to be derived from vocational education which is so planned as to give training for young people who are engaged in employment of any kind is the possibility of further selection of workers according to their adaptability to the task in question. Where efficient teachers follow the young worker through his period of training, much can be accomplished by way of discovering special abilities or aptitudes and the final placement of the employee can be determined with much better satisfaction to all concerned.



The first and most important steps necessary to the establishment of a system of training which will conform to the principles set forth in this chapter may be briefly summarized as follows:

1. A complete analysis of the various trades for which workers must be secured. This will include a study of each department of the organization to determine the exact nature of the tasks developing upon each individual. Many of the recently published educational surveys, such as those made in Cleveland, Richmond, or Minneapolis, as well as the studies of the trades involved in the shipbuilding industry made by the Federal Board for Vocational Education, contain material of this kind.

2. The development of training courses based upon the conditions revealed by the analysis described above.

3. Coöperation with local, state, and federal agencies to eliminate duplication of educational offerings. The passage of the Smith-Hughes Bill will doubtless give rise to much new effort on the part of public agencies, and industry should stand ready to take its proper share in the evolution of better methods.

4. The selection of instructors and supervisors who are familiar with the trade requirements of the concern. If persons of the right training cannot be found who possess this knowledge, arrangements should be made for instructors to spend some time in immediate contact with the several tasks from which their students come.

## CHAPTER VIII

### TRANSFER, PROMOTION AND DISCHARGE

**A**NSWERS to several of the more important questions relative to promotion and discharge are given on the chart facing page 32.

Other significant replies to questions bearing upon these subjects are given in full at the end of this chapter. While these replies will serve to show the general tendencies of the firms studied, there are certain important features that may be briefly considered.

The first logical step in preparing machinery for caring for promotions would appear to be the preparation of an outline or plan of the organization. This should be based upon the job analyses and a careful study of the relation of the several departments, and should contain a classified list of positions, so arranged as to show their relative desirability, degree of responsibility, and the training required for each. Possible lines of promotion should be mapped out so that it will be possible for the employee to prepare himself with the help of the education department for some definite line of advancement.

Without a centralized employment department, it is not probable that adequate records will be kept either of the employee's efficiency rating or of his transfers from one department to another. Under a well or-

ganized plan, vacancies will be filled by promotion, and to do this justly demands complete service records for each employee. Foremen and department heads are often consulted in determining whether an individual shall be transferred or promoted, and they usually contribute a judgment of his efficiency; but final authority in transfer and promotion, and to a less extent in cases of discharge, is coming more and more to be placed in the hands of the employment department.

The replies to Question 5, Part IV of the questionnaire, suggest various methods of determining the employee's efficiency rating. Transfers and promotions are based upon these points:

1. Personal visits to the several departments by the employment manager or his representative, thus keeping in close touch with individual workers.
2. Records of piece work and reports of sales.
3. Record of errors and material wasted.
4. Attendance record.
5. Performance in comparison with a standard set by time studies and job analysis.
6. Reports from foremen and department heads which rate individuals on such points as adaptation to work, training, promptness, accuracy, co-operation, attitude toward firm or toward work, etc.
7. Medical examination.
8. Suggestions for improvement offered.

Opinion is still divided as to the wisdom of giving the employment department complete control of discharge. Of the nineteen significant replies received to the question, "What control, in your opinion, of discipline and discharge by the employment manager is

advisable?" fourteen (73.6 per cent) were in favor of complete control by the employment department. Discharge is undeniably greatly lessened by giving the employment department authority to investigate each case. In this connection it is well to note that wherever cases of voluntary leaving have been carefully looked up, considerable reduction in the turn-over has resulted. To make this investigation effective, the employee is usually forced to get the approval of the employment department to his discharge slip before his last pay can be drawn. Under this plan employees are necessarily kept from three to five days in arrears on their pay in order to prevent leaving on pay day.

The loss of valuable employees can frequently be saved to the company by transfer to some other department. Possible grounds for transfer are:

1. Personal feeling between the foreman or department head and an employee.
2. Better qualifications for some other task.
3. Health conditions may necessitate a change.
4. Requests for transfers come from employees who have fitted themselves for some different line of work.
5. Certain tasks become irksome and dissatisfaction is avoided by occasional changes.

The following quotations from replies to the questionnaire include all of the significant statements dealing with these subjects.

Besides offering practical suggestions, they give a fair idea of the general trend of practice.

It should be borne in mind that Nos. 1 to 12 are firms without distinct employment departments.

## QUOTATIONS FROM REPLIES TO THE QUESTIONNAIRE

Part III. Question 7. "What follow-up system is there by which the employment department keeps in touch with employees and their tasks?"

No. 1. No formal system.

No. 2. None except foremen's reports.

No. 3. Foremen in each department observe the work of each employee under their immediate supervision.

No. 5. Close personal touch with all employees is the most important means. A card index is kept of each man's record.

No. 6. Superintendent keeps in personal touch with men.

No. 7. None.

No. 8. In general, hiring and follow-up is done by foremen.

No. 9. Superintendent makes daily visits to factory. Knows all his men personally. There is no formal rating by foremen or other persons.

No. 10. The superintendent relies on his foremen entirely to get work done. Reports from customers determine how well this is done. The superintendent knows the men only in a general way, and believes that since the foremen are responsible for the work, they should be allowed to say who shall do it.

No. 11. Depend almost wholly on file giving the amount of sales. Little dependence is placed in the reports of department heads.

No. 13. Every employee's quarterly earnings kept by employment bureau. Bonus charts are kept by each department. Frequent consultation with foremen.

No. 15. All new employees are followed up closely for the first three months. The employment department keeps on file a record of each employee's wages, errors, suggestions, and progress in the training department. The employment manager makes a point of seeing each new employee two or three times during the first few months. Reports from department heads are also secured.

No. 16. Twice a year judgments of the efficiency of every individual in our employ are made under the direction of the employment department by the executives in direct control of each individual. Every individual is considered for increase semi-annually.



No. 17. New employees are not only listed, but asked to call at the employment and service department at the close of work. A special follow-up card is kept in the payroll department to denote progress on piece work. These are open to the employment and service department, but those that are not satisfactory are brought to their attention, as well as the slightest expression of dissatisfaction on the part of new employees as well as old. The names of all new employees are also put in a tickler and brought to the attention of the employment and service department over a long period of time. Besides this there is a general contact with the working force in the service department. (For a sample of the follow-up card in use see form No. 14, page 128.)

No. 18. Report on employee's blank. (See form No. 15, page 129.) Frequent talks with foremen.

No. 19. By personal contact. Employment manager is in the works three-fourths of his time.

No. 20. Foremen report to employment manager, using form No. 16, page 130.

No. 21. Personal observation, interviews, and periodical reports from department heads.

No. 22. Individual records of work are kept in some departments.

No. 23. A personal efficiency record is taken twice a year on the following qualifications: Quantity of work; quality of work; executive ability; originality; adaptability; habits; attendance.

No. 24. See Employee's History Card, Form No. 17, page 132. Opportunities disclosed by this are made use of by transfer as circumstances permit.

No. 25. Nearly all employees are on piece work, so wage is an important means of judging. A quantitative record of output and waste is kept of all time workers. We depend on personal contact with all employees.

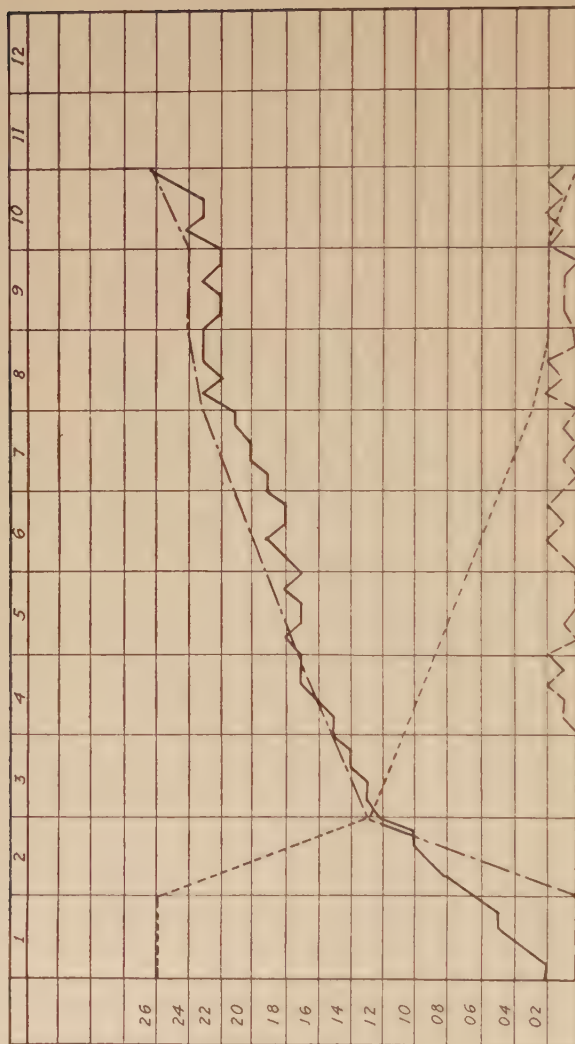
No. 26. Foremen report on individuals. Personal observation and study of employment department.

No. 27. Keep close touch with pay roll (nearly all employees are women on piece work). Depend on report of foremen and general manager. Personal contact with employees.

Part III, Question No. 8. "What would be the ideal

DOW, JANE

TOP PKT. CUT IN 2-9-15



— Piece Work Earnings    - - - - Retainer    . . . . Standard Line    - - - - Rejections by Inspectors

FORM No. 14. FOLLOW-UP CARD FOR EMPLOYEE'S RECORD

## REPORT ON EMPLOYEE

Date.....191  
 Name..... No.....  
 Dept..... Position.....

## Positives shown

Careful  
 Punctual  
 Accurate  
 Industrious  
 Thoughtful  
 Obedient  
 Honest  
 Patient  
 Sober  
 Reliable  
 Quiet

## Negatives shown

Careless  
 Tardy  
 Inaccurate  
 Lazy  
 Forgetful  
 Disobedient  
 Dishonest  
 Impatient  
 Intemperate  
 Unreliable  
 Agitative

With reference to this employee, I recommend:

Lay off

Discharge

Transfer to dept.....Position.....

Change in rate from.....To.....

Disposition by employment dept.

To take effect.....191

Reason .....

.....

.....

.....

..... Dept. head

Approved .....

## REPORT ON EMPLOYEE

Name .....

Dept. ....

Date .....

## SCORING

Interest in work.....

Personal App. ....

Efficiency .....

Punctuality .....

Salesmanship .....

Ability for learning route.....

Remarks .....

SIGNED .....

FORM NO. 16. FOREMAN'S REPORT TO EMPLOYMENT MANAGER

follow-up method from the employment manager's view-point?"

No. 7. Daily record of each new employee for at least one week.

No. 9. Personal contact with employees.

No. 10. I do not believe in any fixed scale or efficiency record not carefully checked up by personal contact with employees.

No. 12. Periodical examination of records showing quantity and quality of work and personal observation of departments by superintendents.

No. 13. I believe any method must be made to fit specific conditions, but have tried to get at it here by making the foremen commit themselves as to the possibilities in a new employee, and thus get them interested in doing follow-up work. Frequent consultations are held with the foremen.

No. 14. Rated upon the quantity and quality of work done.

No. 16. To have enough local representatives of the personnel division to have first-hand knowledge of the efficiency of every individual.

No. 19. Personal contact with employees.

No. 20. Personal work as far as possible.

No. 23. Have the foremen send the employment department: (1) A preliminary report of the workman; (2) An efficiency record after two weeks' time; (3) An efficiency record once a month thereafter.

Part IV, Question 2. "What, if any, promotion scheme have you?"

No. 1. Vacancies are filled from employees when possible. There is no regular system of promotion.

No. 3. None in particular, but reward good work by increase in salary.

No. 5. A card record of each man is kept. Employees are rated on the kind and amount of work done. All cards are inspected by superintendent before pay day. There is a careful follow-up of every employee from week to week. Promotion is on merit alone.

No. 6. None. Not entirely desirable that men should care to be promoted. Prefer to have them efficient and contented at present job.

No. 7. None except merit.

No. 8. Promoted by foremen based on ability shown.

No. 9. Nothing definite. Higher positions always filled from the ranks. Promotion is almost entirely by advance in pay since changes are very few. There are many men



EMPLOYEE'S HISTORY		
Name.....	Address.....	Clock No.....
Date of Employment.....		
Date of Preceding Report.....		
	Rating by Foreman	Rating by Employment Dep't
Principal Work done since last report.....		
Adapted to Work.....		
Sufficiently Trained.....		
Attitude Toward Work.....		
Capable of Filling Better Position.....		
Special Aptitude.....		
Promptness.....		
Accuracy.....		
Capacity for Team Work.....		
Foreman		Emp. Div.

FORM NO. 17. EMPLOYEE'S HISTORY CARD  
 Blue card, 8 by 5 inches, Nothing printed on the back

on the pay roll who have been in the service of the company for many years who could be replaced by younger men at less salary, but it is not considered best for the company to do so. The best results are secured from satisfied employees who know that their places are permanent during good behavior.

No. 11. No effort in this direction. Advance is usually in pay only.

No. 13. Special tests are given by the employment bureau. The best men in every department are transferred to better work if possible.

No. 14. There is a well defined scheme of promotion for apprentices.

No. 15. All jobs are graded according to the range of pay in each, and an effort made to move employees from lower to higher positions. Outside help is not employed for higher positions unless there is no employee available.

No. 17. As all operations are classified, steps for promotion are very apparent. For a better job, preference is given wherever possible to those who have a good record of quality and production and spirit on the next lower class job. All foremen, superintendents, clerks, etc., are recruited from the ranks of regular workers. All workers and others can apply for any definite work or advanced positions that they wish. Applications are always accepted and considered.

No. 18. It rests with the foremen to give a man what he is worth. Followed up by the employment office to see that everyone gets a square deal.

No. 19. Not definitely outlined. Oldest in service are promoted first except in cases of exceptional ability.

No. 22. Individual records are kept in a few cases. Otherwise we depend on the judgment of foremen and superintendent.

No. 23. There is no systematized method of promotion. This is almost entirely the function of the superintendent. We do, however, make it a plan to promote from the ranks wherever possible.

No. 26. Based on merit. If deserving, the employee is advanced every three months, 2½ cents per hour up to the limit the job will pay.

Part IV, Question 3. "Are the opportunities for advancement made known? How?"

No. 1. No effort is made to show this. Most employees judge for themselves from promotions of others.

No. 2. Only by the foremen.

No. 3. Not in advance. We make no promises until each new employee has demonstrated his ability.

No. 4. Chiefly by example.

No. 5. This is done very carefully by a personal conversation at the time of employing a new man. Older employees know what to expect by seeing others advanced.

No. 6. No.

No. 7. No.

No. 8. At time of hiring.

No. 9. No. The company is small and men are told that they can expect wage increases from time to time.

No. 10. No.

No. 11. No.

No. 13. Consistent picking from the ranks to fill better jobs gives the policy sufficient advertising. The bureau keeps a record of men wanting transfer, the results of tests, etc.

No. 14. A general explanation is made at the time of employment. Within a few weeks after being placed on the pay roll the employee is called into the office of the welfare manager who talks over his progress and advancement.

No. 15. Opportunities are carefully explained at the time of employment. Also, all employees are free to seek advice from the employment department at any time.

No. 16. No systematic method is used for making opportunities for an advancement known, but our main resource for all grades is through promotion, and our own store is the first place we look when a vacancy occurs.

No. 17. Opportunities for advancement are gone into in detail at the original interview. Constant promotion from the ranks is sufficient to keep them before the eyes of all.

No. 18. The opportunities are explained to the employee when he is taken on or transferred.

No. 19. Not emphasized. Known by seeing others advanced.

No. 20. Yes, at the time they are hired and by conversations later.

No. 21. Employment manager explains in course of interview.

No. 23. These are made known to the applicant in a general way by the employment manager before employment.

No. 24. Explained to the individual who shows promise.

and by the foreman or employment supervisor as circumstances dictate.

No. 25. Informed when hired by the foremen or by the employment department. An instruction book is in course of preparation in which will be incorporated some such information.

No. 26. Only in a general way. Men are informed when hired of the qualities necessary to advancement.

No. 27. This is talked over when the person is hired. Since the advance, save in pay, is slight, this phase is not important here.

No. 29. The employee is instructed at the time of his first interview in the employment department.

Part IV, Question 5. "What methods are used to determine and rate the efficiency of employees?"

No. 2. Reports from foremen.

No. 3. None. Judgment of foremen considered sufficient.

No. 4. From record of work. Nearly all are on piece work and a record is kept of the amount done.

No. 5. Card record of each man's work kept in paymaster's office.

No. 6. No methods in use. Experiments are being tried on office force.

No. 8. Judgment of foremen.

No. 9. Personal contact with all of the force.

No. 10. Depend entirely on judgment of foremen.

No. 11. Depend almost wholly on sales report and judgment of department heads.

No. 12. Record of piece work. Reports of foremen.

No. 13. The task and bonus system (which will soon be in universal use here) is too complicated to describe fully, but it makes a careful study of the personnel, and the operatives "promote themselves" when such a system is scientifically handled. The incentive and the opportunity are both generously provided and the reward is proportionate.

No. 14. The quality and quantity of the work done is recorded.

No. 15. Records of productivity, errors, suggestions, and attendance.

No. 16. For sales people it is done through two methods, one through analysis of sales records, and the other through

analysis judgments made by the employment office in conference with the executives in charge of the departments. For all other employees it is based on the analysis of judgments. A personal-record system is being devised which will assure a much more accurate method of measuring the efficiency of the individual.

No. 17. Methods used for determining and rating efficiency are very complicated. Tasks are set by scientific time-study methods. Skill required is the basis of classification. The class rate divided by the standard task forms the piece rate. Employees' records are chiefly followed up by the payroll ledger sheet. (See Form No. 18, page 139.)

No. 21. The value of a task is determined by experiment, based on so much per hour. With this as a standard the efficiency is determined. Non-productive employees' efficiency is based on observation and reports.

No. 24. Record is kept of amount and quality of work on piece work. Employees are rated independently by the foremen and by a representative from the employment department on the following points: adapted to work; sufficiently trained; attitude toward work; capable of filling better position; special aptitude; promptness; accuracy; capacity for team work.

No. 25. See question 7, part III, page 126.

No. 26. See question 7, part III, page 126.

No. 29. Reports from foremen. Promotion lies with them entirely. This arrangement is not satisfactory.

No. 30. Judgment of superiors and instructors.

Part IV, Question 8. "What provision is there for transfer and try-out of employees to other work in the establishment?"

No. 13. "Transfer Wanted" file at bureau, which is first resort when man is needed. "Cross index" by experience, of all employees, which means that we hire "outside" only when no transfer is possible or practical.

No. 14. Within a department, through the department manager. Transfer from department to department, through employment department.

No. 15. This is practiced regularly. We transfer about 225 each year from one department to another.



No. 16. It is a firmly fixed policy not to dismiss a person for the simple reason that he has been inefficient in one kind of work. He is tried in various kinds of work before dismissal, if it is possible to make such a transfer.

No. 17. There is a very comprehensive and elaborate system provided for trying out employees in other work. It is not uncommon to have employees tried on a half-dozen jobs during their first year of employment.

No. 18. Transfer takes place through employment office with consent of foremen and superintendents.

No. 22. Whenever possible employees are given work in another department when their own is slack. If special ability is shown in the new work, an effort is made to make the transfer permanent.

Part V, Question 1. "What are the various causes for discharge from different positions and different departments?"

No. 1. Drunkenness; inefficiency; irregularity at work; disobedience.

No. 2. Disobedience; dishonesty; intemperance.

No. 3. Seldom discharge. Reasons are varied.

No. 4. Dishonesty; inefficiency; disorder; unsteadiness; untidiness; drinking.

No. 5. Lack of development—inability to advance. It is highly important that a man be capable of improvement and advancement. If he cannot attain a certain minimum standard he is discharged.

No. 7. Inefficiency; intemperance; laziness.

No. 8. Unreliability; stupidity; slowness; dishonesty.

No. 9. Drunkenness; inefficiency; lying.

No. 10. Carelessness; indifferent work; drunkenness.

No. 11. Stealing; intoxication.

No. 13. Careless, lazy, incompetent, unreliable, drunkenness, talking too much, bad disposition, trouble breeder, insubordinate, misconduct, misrepresentation.

(For the year 1915, only 2.2 per cent of employees were discharged.)

No. 14. Inefficiency; continued irregularity in attendance; fluctuation in volume of work.

No. 15. Intoxication; bold violation of certain rules; unsteadiness.

No. 17. Bad spirit, refusing to co-operate, and impossibility of development along these lines; inefficiency after thorough trial.

No. 20. Drunkenness; dishonesty; inability to do the work assigned; etc.

No. 21. Incompetency; insubordination; incompatibility; and disloyalty.

No. 22. Refusal to obey orders; fighting; stealing; lack of personal neatness.

No. 23. Incompetency; carelessness; disobedience; and intoxication.

No. 24. Insubordination; intoxication; infectious disease; incompetence (after trial in enough departments to make sure).

No. 25. Usually insubordination. Inability to make day guarantee on piece work. Careful selection has eliminated all cases of intoxication.

No. 26. Habits; lack of ability; agitation; neglect of work; disloyalty; carelessness; tardiness; lost time.

No. 29. Unwillingness to transfer is the chief reason. Very few are discharged.

No. 30. Lack of ability; misconduct; slackness of work.

Part V, Question 5. "What control, in your opinion, of discipline and discharge by the employment manager is advisable?"

No. 5. Complete control is essential.

No. 9. Employment manager should have full control subject to veto of superintendent. It is likely to prove dangerous to let employees have too much to say with respect to discharge, especially with low-grade or foreign-born help.

No. 13. The bureau acts as a court of appeal, but has very little such work as foremen know what a stringent check is placed on their action and do not discharge unless the need is evident. Transfer can frequently take the place of a discharge, especially when a foreman dislikes an employee personally. The system works very smoothly. It is dangerous in my opinion to remove a foreman's authority, but his actions should be checked up in all cases and he should know definitely that such a course was followed.

No. 14. All discharge from the company should be effected through the employment department.

From Dec 20, 1915	Pi, 1916
To June 17, 1916	P13, 1916

FORM No. 18. PAYROLL LEDGER SHEET SHOWING EMPLOYEE'S RECORD

No. 15. Every case should have his sanction if he is charged for an increase in turn-over figures.

No. 16. The employment manager's consent should be secured before any steps are taken in discharge.

No. 17. In our opinion, discipline and discharge are essential parts of the function of employment.

No. 18. Allow final discharge to rest with employment manager. He will always have to work with superintendents and foremen and use diplomacy.

No. 19. He should be the high court and use his power as little as possible. He should teach and support his foremen, but should not hesitate to reverse their decisions if necessary.

No. 20. Complete control with general manager's assistance.

No. 21. He should have complete control of both discipline and discharge; the former through the department heads and the latter through his own department.

No. 22. Full control.

No. 23. Should have absolute control.

No. 24. I am satisfied with the arrangement here. The foremen may send men for insubordination or intoxication, and the hospital officials on account of disease, to the employment department. The case is investigated and discharge approved or some adjustment made.

No. 25. Complete control should be vested in this department.

No. 26. Full control after a careful study of the situation and consultation with foremen and superintendent if thought necessary.

No. 27. Should only be expected to investigate cases of discharge by foremen.

No. 28. Entirely satisfied with present system of giving foremen power to discharge subject to review by employment department. The foremen ought to be held strictly accountable for the work of their departments and for every case of discharge. Any other system leads to confusion due to divided responsibility.

No. 29. Complete control in this department is advisable.

A summary of replies to this question is given on the following page:

## SUMMARY OF REPLIES TO PART V, QUESTION 5

Total number of significant replies .....	19	
Number in favor of complete control by employment department .....	14	(73.6 per cent)

Establishing a card record system for each employee by no means solves the problem of locating and collecting the data necessary in the work of the employment manager. In organizations carrying several thousand persons on the payroll, it becomes an exceedingly laborious task to compile by ordinary methods any extensive figures concerning the length of employment, rates of pay, or reasons for leaving.

Various methods have been devised for lessening the burden of handling employees' cards. One of the best of these is the method of using flags or visé signals attached to each card. By using numbers or letters across the top of the card and five or six different colored flags, it is possible thus to arrange for the tabulation of a large number of characteristics.

Another method which is adapted to calculating the labor turnover as well as quickly finding employees who possess a number of different requirements is the Findex file illustrated in the form below. A punch is used to connect any two of the round holes, thus making an opening similar to the long apertures at the side of the card. To pick out the cards for men answering a given description, rods are inserted at the proper points as shown by a duplicate card on the front of the box. When the box is turned upside down, all the cards having elongated perforations at the right places drop down about  $\frac{3}{8}$  of an inch. Those which do not conform to the given description are held firmly in place by the rods. By inserting a rod through the slot provided at the top of the cards, those that have dropped down are held in position when the box is



turned upright. Cards of this kind can be made up to suit the requirements of any organization.

Various types of electrical devices have also been perfected by which punched cards can be mechanically assorted. These devices are especially suited to large organizations employing over 2,000 persons.

FAMILY INFORMATION		CAUSE OF LEAVING		EYES		OCCUPATION		GENERAL DATE OF EMPLOYMENT	
YEAR BORN	SEX	NATIONALITY	RESIDENCE	REASON	REASON	Color	Other	Good	Bad
0123	Male	0123	0123	0123	0123	0123	0123	0123	0123
1	21	31	41	51	61	71	81	91	101
0456	Female	0456	0456	0456	0456	0456	0456	0456	0456
2	12	22	32	42	52	62	72	82	92
1478	Male	1478	1478	1478	1478	1478	1478	1478	1478
3	13	23	33	43	53	63	73	83	93
2579	Female	2579	2579	2579	2579	2579	2579	2579	2579
4	14	24	34	44	54	64	74	84	94
0123	Male	0123	0123	0123	0123	0123	0123	0123	0123
5	15	25	35	45	55	65	75	85	95
0123	Female	0123	0123	0123	0123	0123	0123	0123	0123
6	16	26	36	46	56	66	76	86	96
0456	Male	0456	0456	0456	0456	0456	0456	0456	0456
7	17	27	37	47	57	67	77	87	97
1478	Female	1478	1478	1478	1478	1478	1478	1478	1478
8	18	28	38	48	58	68	78	88	98
2579	Male	2579	2579	2579	2579	2579	2579	2579	2579
9	19	29	39	49	59	69	79	89	99
2682	Female	2682	2682	2682	2682	2682	2682	2682	2682
10	20	30	40	50	60	70	80	90	100

EMPLOYEE'S RECORD CARD  
Designed by Independence  
Philadelphia, Pa.

Form 127

## CHAPTER IX

### TRAINING AND QUALIFICATIONS OF EMPLOYMENT MANAGERS

THE returns are well agreed upon the point that the successful manager needs a large amount of first-hand knowledge of the tasks for which he is to secure workers. To judge a man's qualifications in any thorough way, even in order to talk with him intelligently, it is vitally essential that the one who hires him be familiar with the technical requirements of the task in question. In some instances employment managers report that they send men to the foremen for final judgment as to their fitness. While such a procedure may be desirable in a highly technical or specialized trade, it seems on the whole preferable to have in the employment office a man of sufficient training and experience to make any delegation of responsibility unnecessary.

The more general qualifications which the employment managers feel that their co-workers ought to possess are exacting in the extreme. A man whose character would fit the composite of their requirements would represent an exceptionally high type. Regarded as most important is the ability to judge human nature. The would-be employment manager must be endowed with a keen insight into human character; not

merely a superficial readiness in judging personality and fitness for special jobs, but a deeper understanding which will permit him to weld a great organization into a stable, harmonious whole. With tact and a pleasing personality he must combine firmness and patience that he may be able to bring others to his views and secure co-operation. He will be obliged to maintain the most friendly relations with all of the company's executives and at the same time win the confidence and friendly regard of the employees. His ideals must be broad enough to comprehend his duty to owners as well as to laborers.

He must have a "real desire to see that the men employed have the right opportunity to advance" and a "disposition to impress upon the prospective employee the feeling that the concern he is representing is solicitous for the welfare of its employees."

He will be expected to get the most out of every worker, but must balance his tendency to develop into a hard taskmaster with a knowledge of the shortcomings of human nature that will prevent his requiring too much of any one.

In order to understand industrial and social conditions he must be well grounded in economics, sociology, and labor legislation. Since he will be for years to come something of an explorer in an uncharted sea, a prime necessity will be the ability to lay out new courses and draw scientific conclusions from his experiences. He must be a master of statistical methods, possessed of enough constructive imagination to make his figures take on life in fresh inspirations and improved methods. If rightly pursued, college courses in these subjects should keep him from being "sentimental or addicted to the generalities or theories of





Women's Lunch Room, Joseph & Feiss Company, Cleveland, Ohio



the usual social reformer." Strangely enough, none of the replies state that the employment manager should be well versed in psychology, and only one hints that a training in economics or business administration would be desirable.

This official certainly needs to know the principles of organization and ought to be able to appraise the real worth of a task to the worker as well as to the employer. Undoubtedly the reason for the absence of any emphasis upon more technical college training is to be found in the fact that many of the men who replied have come up through the ranks in the firms with whom they are employed and prize their practical experience above mere scholastic attainments. A college education or its equivalent would seem to be the lowest educational standard that ought to be set for one in such an important position.

Beginning with the autumn of 1916, the Amos Tuck School of Business Administration and Finance of Dartmouth College has offered a graduate year of study in employment problems.<sup>1</sup> This special course includes a discussion of the problems of management relating to "the employment and supervision of personnel, the control of working conditions, and the relation between employer and employee." Each student who pursues the course is expected to spend a portion of his time doing practical work as an apprentice in some employment department and will prepare a thesis on the solution of some *definite problem of management in a specific plant*. Preparation for the year of graduate study will consist of three years of general college work, including courses in economics, po-

<sup>1</sup> See Annals, May, 1916, article by Harlow S. Person, on "University Schools of Business and the Training of Employment Executives."

litical science, and sociology, followed by a fourth year of courses which give an introduction to the practical field of business.

A large number of universities now offer graduate and undergraduate courses in business administration. Many of these are conducted in a thoroughly practical way and should afford very valuable training to prospective executives in the employment field. The importance of connections being established between university departments offering courses of this nature and various business organizations cannot be stated too strongly. On the whole it might be profitable for both vocational counselors and employment managers to spend a considerable length of time as actual workers in different occupations, but the serving of any apprenticeship of sufficient length to acquire a practical working knowledge of several vocations is impracticable; and even if it were possible, it would be likely to result in deficient training along other lines. The best possible substitute for extensive trade experience is spending some time as an unpaid assistant in a number of departments while still under college guidance.

Full recognition of these principles has been made by the Buffalo Chamber of Commerce in its proposed plan for a College of Industrial Engineering. Class rooms, library facilities and instructors will be furnished by the University of Buffalo. Students expect to gain the necessary practical experience in local business houses and factories. Foremen and other executives from the factories and shops will be admitted to the courses as well as regular students of the University. It is hoped that firms can be encouraged to offer scholarships to promising employees.

The following topics are listed in the tentative outline for the course: Experimental and applied psychology. Industrial hygiene. History of apprenticeship. Sociology. Industrial Relations. Industrial Law. Factory Organization. Business Administration. Shop Management. Distribution and Traffic.

Very little information was secured as to the schooling of the employment managers. Fairly complete statements were received from each as to experience and other positions held.

No. 15 had served his firm for twelve years in various capacities before entering upon his present duties. As travelling salesman, foreman, and advertising manager, he was brought into intimate touch with many of the company's activities. No. 22 had served even a longer apprenticeship. He began as a boy in the stock room and advanced steadily through shipping department, sales-room and paymaster's office to the post of assistant superintendent.

The employment manager of a large department store commenced as a salesman for a manufacturing plant, was promoted to assistant sales manager, and had charge of employment at the time of being transferred to the position which he now holds.

No. 19 did not enter the employ of his company until late in life. After five years as head of the commercial department of a high school, he entered the purchasing division of the firm which he now represents and was promoted from there to his present position.

No. 30 served for several years in the store-keeper's department and was chief clerk there when he was promoted to the position of assistant to the employment manager. Two years later he was given full charge of this work.

A recently established department has at its head a man who had successively been superintendent of production and manager of the experimental department.

The men who had the best theoretical training had as a rule spent but little time in the other departments of their own factories. One had been for several years a mechanical engineer and had seen service with efficiency men in the field. Another had spent six years in civil engineering work, the last two years of that period having been spent as the assistant city engineer of a city in Massachusetts. A third had been for several years engaged in educational work.

A large department store gives this interesting formulation of its requirement for the office of employment manager. It leaves something to be desired, but is highly suggestive so far as it goes.

#### REQUIREMENTS FOR EMPLOYMENT MANAGER

To be responsible for the selection, training and education of employees.

##### I. GENERAL REQUIREMENTS

Sex: Male.

Age: At least 35.

Education: A mind trained either in an institution of higher education or by experience.

Appearance: Dignified, forceful, yet approachable looking.

##### II. PHYSICAL REQUIREMENTS

Physical and Nervous Vitality: To allow complete control under trying circumstances.

### III. REQUIRED QUALITIES

Interested: In the force as individuals.

Sympathetic: With their ambitions, their abilities, their possibilities.

Big, Fairminded and Impartial: In engaging, promoting and discharging employees.

Humanitarian: In concerning himself with the conditions under which the employees work.

Tactful: In drawing employees out and putting them at their ease.

Imaginative: In inventing solutions of problems.

Sound but Magnanimous in His Judgment: To weigh carefully all evidence before making decisions, but to be ready to take a chance of being gloriously wrong.

Honorable: In using his powers legitimately.

Masterful: Monarch in his own realm, yet approachable and of the people.

Inspiring: To lead without driving.

Open Minded: To untried methods and movements in industrial circles; whether idealistic or practical.

Constructively Discontented: To be ever striving for better and nobler fundamentals on which to build business.

Energetic: In making the machinery of the organization move, rather than sitting back and watching it move.

Thoroughly Executive: In having the forces carry out their duties and meet their responsibilities.

Sensitive: In the managing of his force to prevent leakage, waste, overlapping, duplication, overflow or insufficiency.

Self-Knowledge: To be able to recognize his own strength and weaknesses.



REQUEST FOR HELP			
To Employment Clerk:		Date.....	
Please supply.....			
to work as.....		in.....dept.	
Cross out words not used	<div style="display: inline-block; vertical-align: middle;"> <div style="font-size: 2em; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle; padding: 0 5px;">           Piece worker Day worker         </div> </div>	Addition to force Replacement	Rate per { hour week
To replace.....		Who leaves.....	
" "	.....	" "	.....
" "	.....	" "	.....
" "	.....	" "	.....
To increase force on.....work			
Reason for increasing force.....			
.....			
Remarks.....			
.....			
Approved.....		Signed.....	
<i>Supt. Sec.</i>			
.....		Foreman.....Dept.	
<i>Gen'l Supt.</i>		<i>(Signature must be Foreman's own, not Clerk's)</i>	

## FORM NO. 19. REQUEST FOR HELP

Thin paper, 6 by 4 inches, perforated on left margin for detachment from stub

## CHAPTER X

### SPECIMEN BLANKS, RECORD FORMS, AND INSTRUCTION BOOKLETS

**I**T will be taken for granted that every employment department will need to devise such record forms, blanks, and printed instructions as are suited to the peculiar demands of the situation. On this account, it would be of comparatively little interest to the average reader to consider many of the forms found in use by the companies visited. For the same reason, numerous details of office practice have been omitted. In selecting the examples presented in this and preceding chapters, the aim has been to illustrate practices which appear to be common to several types of business and which have as wide an application as possible.

An extended discussion of the application blank and several specimen forms will be found in Chapter VI. The next blank to be considered is the requisition for help illustrated by Forms 19, 20, and 21. It is usually directed to the head of the employment division, and is to be signed by the foreman or department head requesting help, by the employment manager, and occasionally by the superintendent or works manager. In the larger establishments, the signature of the superintendent is not required except in cases where considerable additions are to be made to the working

## REQUISITION FOR HELP

Date.....191.....

To Operating Engineer  
 Works Manager  
 Superintendent  
 Employment Div.

Please furnish one man for permanent employment as  
 temporary

.....on.....shift in.....Dept.

at rate of about.....per.....to report for work on

or about.....191

Signed.....Foreman.

To increase force..... To take the place of.....who {  
 { Has left  
 { Is discharged  
 { Is sick

Approved Works Manager or  
 Superintendent .....

Operating Engineer.....

## FORM NO. 20. REQUISITION FOR HELP

Thin paper, 6 by 4 inches. For back, see below

Requisition Filled.....191

By Sending..... Clock No.....

*Name of Employee*

{ Approved Health and Sanitation Dept..... } Employment Div.....  
 { Date & Time..... }

Accepted.....Foreman

Entered..... Cost Department .....

## FORM NO. 20. REQUISITION FOR HELP

This text is carried on the back of Form No. 20

## REQUISITION FOR HELP

Always use this form when in need of help and whenever possible notify  
Employment Department one week ahead.

Employment Dept.: \_\_\_\_\_ 191 \_\_\_\_\_

Please employ for Dept. \_\_\_\_\_ one \_\_\_\_\_ age \_\_\_\_\_ to \_\_\_\_\_  
with the following qualities \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Kind of work wanted for \_\_\_\_\_

Wages to start \_\_\_\_\_ Chances of advancement \_\_\_\_\_

Steady or temporary work \_\_\_\_\_ When needed \_\_\_\_\_

Signature \_\_\_\_\_ Dept. \_\_\_\_\_

## NEW EMPLOYEE SLIP

This slip is to be sent to Acct. Dept. for record, by department head, as  
soon as new employee is placed at work.

M \_\_\_\_\_

Address \_\_\_\_\_

Date of	Married or	Starting	Check
Birth _____	Single _____	Wage _____	No. _____

Is to begin work on \_\_\_\_\_ in Dept. \_\_\_\_\_ in the position referred to  
on back.

Employment Department  
Per \_\_\_\_\_

Began work \_\_\_\_\_ 191 \_\_\_\_\_ Dept.  
Head \_\_\_\_\_

If transferred from another dept.  
or if employee worked here before  
state below: Div. \_\_\_\_\_  
Supt. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## FORM NO. 21. REQUISITION FOR HELP

Original is 6 inches wide, 4 inches high, printed on both sides as shown

I accept employment agreeable to all rules of the Company

### EMPLOYMENT CARD

..... 191....

Name,	No.	Dept.
Address,		
Employed,	Rate	Left
Age	Charges, Tools, Etc.,	
Nationality	Married Single	
Certificate as follows	Schooling	Illiterate
	Day	Night
	Attends What School	
Pay No.	Remarks:	
Cash No.		
Am't Paid		

FORM No. 22. EMPLOYMENT CARD, MADE OUT BY FOREMAN AND SIGNED BY EMPLOYEE

Blue card, 6 inches wide and 4 inches high



force, or when some other unusual circumstance obtains.

The reverse of the requisition for help is frequently used as a record for the accounting or pay-roll department as in Forms 20 and 21. Where a physical examination is required, space may be left for the signature of the examining physician or the head of the health department.

Watchman.....			
Please Pass.....		to	
.....Dept.		.....Foreman	
When.....	O'clock.....	A. M.....	P. M.....191.....
<i>Signed</i> .....			
<i>Per</i> .....			
Employment Dept.			

**FORM NO. 23. PASS FOR ISSUANCE TO NEW EMPLOYEES**

Pink slip, 5 by 3 inches

A large manufacturing concern (No. 29, Chart No. 1) asks each employee to sign Form No. 22. It is made out by the foreman after the individual goes to work and is intended for the use of the cashier. When the employee is discharged, a red card is attached to it stating the reason for dismissal and the two cards are filed away, for reference in case the employee should ask to re-enter the company's service.

Numbers 23 and 24 are passes issued to new employees. No. 24 has the advantage of being easily

filled out by punching the appropriate date and purpose.

As soon as an application has been favorably passed upon by the employment department, some notice is forwarded to the paymaster. Form No. 27 contains the necessary information regarding the employee's work and sufficient data to serve as an identification.

Date	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	1	2 Jan.	3 Feb.	4 March	5 April	6 May	7 June	8 July	9 Aug.	10 Sept.	11 Oct.	12 Nov.	13 Dec.	14	15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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<i>Hand this Pass personally to the Door Keeper</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Emergency	For Book only	Return on Call	6	15	30	45	7	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45	2	15	30	45	3	15	30	45	4	15	30	45	5	15	30	45	6	15	30	45	7	15	30	45	8	15	30	45	9	15	30	45	10

Name.....							
HEAD OF DEPARTMENT MUST REGISTER EXACT TIME OF EMPLOYEE AND SIGN CARD EACH DAY.							
Day	Out Noon	In Noon	Floor Supt. Signature	Day	Out Noon	In Noon	Floor Supt. Signature
M				T			
T				F			
W				S			
Mon.	Tues.	Wed.	THIS CARD MUST BE PUNCHED EVERY MORNING BY DOORKEEPER AT STREET ENTRANCE		Thur.	Fri.	Sat.

**FORM NO. 25. EMPLOYEE'S PASS USED BY A LARGE DEPARTMENT STORE**

White card,  $4\frac{1}{2}$  by  $2\frac{5}{8}$  inches. For back, see below

and safety. One of the most comprehensive of these pamphlets is issued by firm No. 15 (Chart No. 1, page 32). It treats of the following points in addition to the topics appearing in the extracts reproduced below: Pay Checks; Starting Time; Closing Time; Hours for

- I. Employees may use either street entrance in the morning. During the day, however, the Time Desk Entrance only is to be used.
- II. The Head of Department shall notify employees when to report. Time Cards not punched before 8.20 may be signed the first time by Dept. Head; the second time the card must be OK'd at Superintendent's Office, 1st floor.
- III. Time of lunch hour shall be recorded in space on opposite side by Head of the Department.
- IV. Time cards will be collected from the racks Saturday afternoon by the Pay Roll Department.
- V. Unless accompanied by a customer, or on lunch hour, employees shall not leave their departments without a written pass.

**FORM NO. 25. BACK**



ENGAGEMENT CARD				
<b>To PAYMASTER:</b>		<i>(Insert "RE" if re-engagement)</i>		
Name.....		No.....		
Home address .....				
Local address.....		Date of birth .....		
Last occupation.....		Employer .....		
Nationality.....		Recommended by.....		
Engaged.....		191..... As.....		
For.....		Dept., Rate.....		
Cross out words not used }		Married      Piece Worker      Productive Labor      New Employee Single      Day Worker      Expense Labor      Replacement		
No. and description of dependents .....				
Previously engaged.....		191..... As.....		
For.....		Dept.      Old No.....      Rate.....		
Approved:  <div style="text-align: right; padding-right: 20px;"><i>Supt.</i></div>		..... Employment Dept. Reported for work..... M..... 191..... ..... Foreman		

## FORM No. 27

Thin white paper, 5½ inches wide, 3⅝ inches high

ENTRANCE ORDER TO PAY-ROLL DEPT.	
<i>(Shall not be issued without previous requisition for new employee)</i>	
Name..... No.....	
Dept..... Position.....	
Classification No.....	
Salary..... To begin.....	
Date entered store.....	
Employment signature.....	
Approved..... <div style="margin-top: 10px;"><i>Store Manager</i></div>	

## FORM No. 28

Thin white paper, 5 by 3 inches

Paying Off; General Instructions for Handling Orders; Duties of Office Clerks; Mutual Relief Associations; Savings and Loan Fund; Accident Compensation; List of Factory Departments. The practice of printing the individual's name on the front cover is a personal touch that adds interest to the booklet in the eyes of most employees.

## BOOK OF INFORMATION AND INSTRUCTION

———— Manufacturing Co.

### INTRODUCTION

The information here given is for the mutual benefit of the ————Manufacturing Company and its employees, and we ask all to co-operate with us by attentively reading each page and carefully observing all the suggestions given.

This booklet will be especially helpful to the new employee, presenting as it does specific information pertaining to the various regulations now in effect, and thus aiding him to adapt himself more quickly to the new surroundings. The beginner will find it is to his advantage to become thoroughly informed concerning that portion of the work on which he is placed. His progress will depend entirely on the thoroughness with which he has mastered each detail connected with his position, so that his work will require less and less supervision as experience is gained and as a consequence his value to the organization will be increased.

The older employees are asked to co-operate with us by being especially attentive and courteous to new employees; to answer all questions pertaining to the work, and to offer any suggestions that will aid beginners to become more familiar with the requirements of their new positions.

## GENERAL INFORMATION

### ABSENCE FROM WORK

Punctuality and regularity on the part of all employees are expected. If unavoidably detained from work through



illness or other causes, your department head should be notified without delay, either by telephoning or by sending word by a fellow employec, so that arrangements may be made to have your work performed during your absence.

#### TIME CLOCK

Each person must register his or her own card personally. Be sure to register on the clock both at the beginning and end of each work period. If at any time you fail to do so take your card to the head of your department and have it corrected at once. This is very important, as it will prevent errors being made in your pay. Try to get a clear and distinct imprint on your card, for otherwise it is very difficult for the Accounting Department Clerks to compute your time correctly. Unless you get permission from the head of your department you should not remove your card from the rack to which it is assigned.

#### ATTACHMENT OF WAGES

Attachment or assignment of wages, or failure to pay bills, will be considered sufficient causes for dismissal.

#### EMPLOYEES' BILLS

Employees owing money should settle by some satisfactory arrangement, so that creditors will not be obliged to refer such cases to us.

#### CHANGE IN ADDRESS

Please notify your department foreman of any change in address.

#### WRITING ON MERCHANDISE

Anyone known to write his or her name and address on goods going out of the factory is subject to dismissal.

#### CLEANLINESS

Each person will be expected to keep his or her working place in a clean, orderly and business-like condition. Waste

paper and rubbish of all kinds should be deposited in receptacles provided for that purpose. Employees should not handle their work with dirty hands, as it wastes material.

#### USE OF WORKING HOURS

Working hours are meant solely for business and all personal matters should be transacted at other times. All personal mail should be addressed to your home, and during working hours employees will not be permitted to receive outside telephone messages nor to see visitors at the office except in very urgent cases, such as sickness or death.

#### USE OF MATERIAL

Work spoiled by carelessness may be charged to the one responsible. Your value to the company depends not only on the amount of work you produce, but also on the amount of material you save. The ability to get more finished product from a certain lot of raw material is in the same class with the ability to get a greater amount of work done in a certain period of time. The employee who is continually striving to effect certain economies is the one whose progress is assured.

#### CARE OF TOOLS AND MACHINERY

Tools and machinery entrusted to you should be handled with extreme care. Attention should be paid to sufficient lubrication. Before using, each bearing should be oiled and if the machine is running continually for a long period it may be necessary to oil it at frequent intervals. Consult your foreman concerning its proper care and if anything appears to be in the least wrong with a machine you are operating, report the matter at once to him, as a machine should not be run when it is out of order.

#### APPEARANCE OF DESKS

If you are doing clerical work your desk is your work bench, and to be used most effectively it should be kept in order. Matters which you have completed and expect seldom

to use, should be placed in a file, as well as all other matters to which other people may have to refer. Pins, clips, rubber bands, etc., should be kept in receptacles and not allowed to scatter around loose in the drawers, nor should they be wasted.

### SUGGESTION SYSTEM

We wish to have each detail, connected with every operation in this factory, executed in the most thorough and up-to-date manner and to that end invite suggestions from all employees. Nothing so clearly indicates the progressive employee as the number of practical suggestions he makes, for this shows he is deeply interested in his work and is striving to improve methods of performing it.

Suggestions to improve methods, machinery, merchandise, etc., may be written out and placed in the suggestion boxes, which can be found near the Bulletin Boards in the various departments or handed to your department head. These suggestions are collected at intervals and carefully considered by the committees which are particularly interested.

When a suggestion is accepted the employee is notified and an award is made, and if it is the first suggestion from that employee a certificate is awarded. When a second suggestion is accepted a framed picture of the factory is presented. The number of suggestions accepted from each employee is inscribed on the brass tag, which is mounted on the frame of this picture. When ten suggestions have been accepted, from one person, a special prize is awarded.

### LUNCH ROOM FOR MEN AND WOMEN

A lunch room has been provided for those who stay in the factory for their luncheons. This is located on the fifth floor of building 3, section 2, and may be reached by using the elevator in building 3, section 1, which will take you directly to the fifth floor. The men's lunch room is on the north side and the women's is on the south side of this room.

All employees who remain in the factory for lunch (with a few authorized exceptions) are required to make use of this room. Several kinds of hot dishes may be obtained, in addition to coffee and milk, at moderate prices. The eating of lunches throughout the plant is forbidden as it leads to un-

tidiness, and attracts vermin, so we ask all who bring their lunches to make use of the lunch room.

### RECREATION ROOM

At the west end of the section in which the lunch room is located is a room for women, and it is hoped that all who are in the factory during noon hour will make use of it.

### CIRCULATING LIBRARY

In the recreation room we maintain, for the use of our women employees, a branch of the Public Library. This branch is open daily from 12:20 to 12:58, and any of the books on hand may be borrowed for a period of two weeks. There is no charge made for the use of these books, and the same rules and regulations apply to their use as are in effect at other branches of the Public Library.

### LIBRARY OF BUSINESS BOOKS

In the room adjoining Department 18 is a useful collection of books and magazines on business and technical subjects. The library hours are in the morning from 8:00 to 8:30 and from 10:30 to 11:00.

Reference books, such as encyclopedias, dictionaries, etc., may be consulted at any time. Employees wishing to borrow magazines or books on any subject should apply first to their department foreman, who will refer the request to the librarian.

Any employee interested in a business or technical subject is urged to make application for books in this library.

### PREVENTION OF ACCIDENTS

A large percentage of all accidents in manufacturing industries is due to lack of care on the part of the employee. Employees should use every precaution in working around machines in operation, to protect themselves from accidents. Machines should not be cleaned or oiled while in operation. If an employee thinks that the chance for accidents will be reduced by applying guards to any part of a machine, he should bring this matter to the attention of his department head.

## TRANSFERRING EMPLOYEES FROM ONE DEPARTMENT TO ANOTHER

It is our endeavor to place employees in the positions to which they are best adapted and for this purpose, and especially with new employees, transfers may be made from one position or department to another.

In places where work is seasonable, we endeavor to keep employees occupied continuously by transferring them temporarily to other places where their services may be required.

## MEDICAL SERVICES

In the interest of our employees we conduct a factory clinic, so that prompt aid may be given in case of sudden sickness or injury. A graduate nurse is in constant attendance, and twice a week a physician, in no way connected with the management, visits our clinic to advise any employee who may be in need of his services. No charge is made for this service.

Our object in maintaining a clinic in the factory is to induce employees to go to the nurse or doctor before they are sick, so that preventative steps may be taken if the health of an employee is endangered.

## NOTICE BEFORE LEAVING

Employees who intend to leave our employ should, when possible, give notice to their department heads at least one week in advance, so that other arrangements can be made to fill the position.

## IN CASE OF FIRE

When a fire alarm is sounded, employees are to remain at their regular work and must not run to the windows. If the fire is in or near your department, do not become excited but depend upon your department head for instructions. In case of danger, or in case it is necessary to clear the room, your department foreman will arrange to have all employees leave by the exit farthest from the fire.

A valuable little book of forty pages entitled "Health Hints" is published by the Men's and Women's Mutual



Relief Associations of the same company (No. 15). that issues the booklet quoted from above. Following the introduction and the general discussion of preventing sickness reprinted below, the booklet discusses in a simple practical way the following common complaints: Boils, Colds, Constipation, Chilblains, Consumption, Diarrhœa, Headaches, Indigestion, Strains, Sweaty Feet. There are excellent suggestions for the care of the teeth and the eyes and directions for treating ordinary wounds.

## HEALTH HINTS

### INTRODUCTION

“The First Wealth Is Good Health.”—Emerson.

A large portion of the practice of the average physician develops from the neglect of the petty ailments which are very common in our daily lives. At the beginning of many complaints, if the patient had applied some of the simple remedies suggested in this booklet, he could have avoided serious illness.

The purpose of this little book is to instruct employees how to prevent sickness and to suggest the steps that should be taken to obtain relief from the ills which most frequently occur.

The information herein given, supplemented by additional suggestions from the factory nurse or our \* clinic doctor, should be of material benefit to you in aiding you to overcome common disorders and to maintain your bodies in that condition of supreme physical efficiency which is earnestly sought by all.

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\* Our doctor can be consulted at the factory clinic at 11:00 A. M. on Tuesdays and Fridays.

### PREVENTION OF SICKNESS

To prevent sickness two things are important: First we should make our bodies as strong and as sound as possible,



and second, we should keep away from contagious diseases. A healthy person is much better prepared to escape and to resist disease than a sickly person. Nor is it so difficult to be healthy if one is careful. Good air; good food; good habits; a proper amount of exercise; sufficient rest and sleep; *personal cleanliness*, and attention to the bowels are necessary.

(a) Good Air—Good air is required both day and night. Keep out-of-doors as much as possible. That is where the best air is found. In the house either windows or doors should be partially opened, to allow the good air to enter and the bad air to escape. If a room smells stuffy the air is not good and this is not healthful.

(b) Good Food—Too little food results in a dangerous weakness; too much, in the accumulation of fat. Neither condition is healthy. The proper amount of food depends on the person, and also on the character of his work and the season. When his work is light a person needs less food, especially in hot weather. Foods vary greatly in the amount of fat, sugar, starch and mineral matter they contain. The needs of the human body are best cared for by a mixed diet. Too much fat, starch or sugar usually results in increase of weight, and they should be avoided by persons inclined to grow stout. The plainer the food the better for the health. Most people know what will agree with them and what will not. If they stick to simple food they will live longer and be happier. Whatever the food may be, it should be thoroughly chewed; otherwise work will be put upon the stomach and intestines which they are in no measure fitted for nor intended to perform. Food should always be protected from flies. These pests often come directly from sewage that is not properly protected, or from manure heaps, to the dinner table and it has been proved that they carry the germs of disease.

(c) Good Habits.—The excessive use of alcoholic liquors is one of the commonest causes of many serious diseases. Even their moderate use is often harmful. The alcohol habit is easily acquired and very difficult to overcome. It is much safer never to learn to drink. Not only are the ordinary liquors dangerous; patent medicines may also be quite as bad. Patent medicines which contain morphine and cocaine are even worse than alcohol.

Though tobacco serves no good purpose, when used in moderation it is generally used without apparent injury.

Everyone would be better off without tobacco; and for some people it is much worse than for others. Growing boys should not use tobacco nor smoke cigarettes. It is extremely undesirable to use tobacco just before meals when there is no food in the stomach. Excessive use of tea or coffee is harmful and for some people their use is even dangerous. If you suffer ill effects from using either tea or coffee it would be much better to do without it.

(d) Exercise.—Moderate exercise is good for every man, woman and child. To keep in good condition, some exercise should be taken every day. Do not get overtired. The best exercise is that which is agreeable. Out-of-doors exercise in the pure air is very good for everyone.

(e) Rest and Sleep.—If one does not have enough rest and sleep he becomes irritable and depressed, and the unrested body is much less able to resist disease. As everybody knows, very young children should sleep much of the time. The period needed for sleep gradually diminishes as we grow older. Children require ten to twelve hours; youths eight to ten, and adults seven to eight hours.

(f) Personal Cleanliness.—The impurities of the body pass out through the skin to a considerable extent, and must be removed if one wishes to remain healthy. This is done by bathing with hot water and soap. Everyone should take a weekly bath at least, and in hot weather, when the skin is more active, daily baths may be necessary. Frequent baths may also prevent skin diseases and boils. Special attention should be given to the cleanliness of the hands, as dirt from them may be carried to the mouth.

(g) Attention to the Bowels.—If the waste of the body is not passed regularly from the bowels, weakness and tiredness, low spirits, headache and loss of appetite will result. A daily movement of the bowels is necessary for good health. It is best to have a regular time for it, and not to permit anything to interfere with this elimination of waste. Bulky food instead of concentrated food will tend to cure habitual constipation.

Good examples of bulky foods are oatmeal and other cereals; potatoes and other vegetables. Meat is the most concentrated food. Constipation is easily cured in the beginning, but only with extreme difficulty later. If a change in food is not effective, a doctor should be consulted without delay.

If you should receive a cut or bruise, no matter how slight it may seem to you, notify your foreman, then go to the Hospital immediately and allow the Doctor to dress it. Trivial cuts and bruises often cause the most serious results.

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**The Norton Companies expect every man to do his part in eliminating accidents.**

**The Best Safety Device known is A Careful Man**

---

Norton Company  
Norton Grinding Co.  
Worcester, Mass.

The Norton companies are trying to eliminate loss of time and wages as well as suffering due to accidents to their employees.

These Companies believe in "Safety First," and do not want careless workmen in their employ

"SAFETY FIRST" means:

To be sure you thoroughly understand your job before starting, and to be careful, not only of yourself, but of your fellow workmen.

When you see a red ball danger sign, take care; look around before you step.

Don't take short cuts through dangerous places, but use regular passage-ways.

If you see a board with a nail sticking up, turn it down—it only takes a moment and may save some poor

## SAFETY BULLETIN No. 1



**To All Applicants For Employment**

---

*This Contains Information of Importance to YOU*

**READ** it carefully and if you do not understand it thoroughly be sure and have the Employment Office attendant explain it to you. He will do so cheerfully.

fellow a long time in the hospital.

Don't leave your tools lying carelessly around on the floor where a passerby can stumble over them, and don't place materials or tools so that they can fall and injure yourself or a fellow workman.

Be careful not to wipe, oil or repair machinery in motion, and always take the precaution to see that the machine can not be started unexpectedly and catch some one unawares.

In working around moving machinery take care that you have no loose clothing such as ties, sleeves, or tails of jumpers dangling so that they will catch in something. Roll your sleeves up or tie them tightly around your wrist.

Don't chip or grind without wearing goggles. Your foreman will provide them.

Don't use tools in bad condition. If they are handed to you, call your foreman's attention to their condition.

FORM NO. 29. FOUR-PAGE "SAFETY BULLETIN"

## INSTRUCTIONS FOR NEW EMPLOYEES

Name.....

Number.....

Report to.....

## LOCKER ROOMS:

Regular employees will be assigned locker-rooms by the Time Keeper, whose office is at the time-desk entrance in the rear of the store. A locker-room on the Sixth floor is for the use of extra people

## INSTRUCTION IN WORK AND CONDUCT:

Your department manager will be directly responsible for instructing you in all of your work and you should be furnished immediately on reporting with a typewritten schedule of your duties. The Educational Department will assist your superior in general educational work. The rule book given you in the Employment Office should be carefully studied in order that you may be familiar with the general rules and regulations of the store.

Sales-people after being entered in the Employment Office, shall report directly to the Educational Office on the Seventh floor, for preliminary instruction before going to their departments.

(OVER)

## RECORDING OF TIME:

You may use either one of the street entrances when you report in the morning. At noon-time and at night you shall use the time-desk entrance only. When you enter in the morning your time-card will be punched at the door. At noon the time when you go to luncheon and return will be recorded by the head of your department on the card and will be signed for each day. At night it is not necessary for you to record your time in any way. On Saturday the time-card must be left in the rack on your floor.

If you come in after 8:20 in the morning, your time-card will have to be signed immediately in the Employment Office. If there is any mistake in the recording of your time you should also go to the Employment Office to have it corrected. Mistakes in pay or in commissions of the sales-force are corrected in the Pay Roll department on the Seventh floor.

## CO-OPERATIVE ASSOCIATION:

Every employee is a member of the Co-operative Association and is entitled to all its privileges and benefits. The office is on the Eighth floor and all the information desired may be obtained there. Employees' Lunch-Room and Club-Rooms are also on the Eighth floor and all new employees are invited to use these rooms freely.

(OVER)

FORM NO. 30. INSTRUCTION CARD FOR NEW EMPLOYEES

Front and back. A heavy card, 5 by 3 inches

ORIGINAL

## INCREASE ORDER

Name..... No.....

Dept..... Position.....

Classification No. ....

Increase weekly salary from \$..... to \$.....

To begin.....

Employment signature.....

Approved.....

*Store Manager*

Thin white slip, 5 by 3 inches

## RECOMMENDATION FOR INCREASE IN PAY

TO EMPLOYMENT DEPT. .... Date..... 19.....

Name..... No.....

Piece worker—Day worker—On salary. .... Age.....  
(cross out words not used)

Engaged..... 19..... as.....

Present occupation..... Dept.....

Increase recommended..... (\$.....) per.....

Increase to date from..... 19.....

Present rate \$..... per..... Proposed rate \$..... per.....

Last increase \$..... per..... Date..... 19.....

Reasons for recommending increase: .....

Approved:

Signed:

*Supt.**Foreman*

FORMS 31, 32. RECOMMENDATIONS FOR INCREASE OF PAY

Green paper, 5½ inches wide, 4 inches high



Valuable educational work has been accomplished in some concerns by means of leaflets, much briefer than the one quoted from above, placed in the monthly pay envelopes. These are usually prepared by the examining physician or his staff. When they dealt with pertinent health and sanitation questions,

REQUEST FOR TRANSFER	
To the Employment Department	Date.....
PLEASE TRANSFER	
Name.....	No.....
From.....	Location.....
To.....	Location.....
Reason.....	
.....	
New No.....	Foreman.....
Date.....	Approved.....
	<i>Employment Manager.</i>

FORM NO. 33. TRANSFER OF EMPLOYEE

White paper, 6 by 4 inches

and were written in concise, simple language, their reception proved most gratifying.

An excellent opportunity for co-operation between the employment and safety departments is offered in the field of instructing the new worker. Form No. 29 is given out to all new employees by the employment department of a large concern manufacturing grinding machinery. It is followed up later by instruction





A Satisfactory Basement Lavatory in a Middle Western Factory



## REPORT ON EMPLOYEE

191.....

Name..... Clock No.....

assigned to this department.....191.....

Is unsatisfactory in the following particulars

Intends to leave for the following reasons

Must be laid off for lack of work

Has been out over (3) three days without notifying us. ....

I recommend that he be transferred  
dismissed

In my opinion he is fitted for work as.....

Dept.

Foreman

(OVER)

FORM No. 34. RECOMMENDATION FOR DISMISSAL OR TRANSFER  
OF EMPLOYEE

Pink paper, 6 inches wide, 4 inches high. Face and back are shown

Amount Due

Approved for

\$..... Week Ending.....191 Payment.....

\$..... Week Ending.....191

Disposition of the case.....

191.....

Employment Division

Noted.....

Health &amp; Sanitation Department

given in various ways by both the employment and safety departments.

Form No. 30 is a very brief set of instructions issued by a department store. It is printed on a white card about 3 by 5 inches.

Occasionally instructions are printed in several languages, but the large percentage of illiteracy among

MANAGER, PAYROLL DIVISION:	
Please transfer the name of	
Registry No. ....	
now on the payroll of the	Department Division
at a salary of \$..... per..... to the payroll of the	
Department Division	Registry No. ....at
salary of \$..... per..... beginning....., 19.....	
Hours: In..... out..... in..... out.....	
..... Manager	
Mgr. Employment and Instruction Dept.	Manager.

FORM NO. 35. PAYMASTER'S NOTICE OF TRANSFER OF EMPLOYEE

White paper, 6 by 4 inches

the foreign-born employees often renders this means ineffectual except in the case of very simple directions.

Forms 14 to 18 inclusive (Chapter VIII) illustrate some of the record forms in use by employment managers who are keeping in touch with the progress of workers under their care. Where similar records are kept, recommendations for increase in pay should have the employment department's approval. (See forms

## TRANSFER RECORD

Name..... Clock No..... is transferred  
 from..... Dept. where his rate was..... per.....  
 to..... Dept. where his rate is to be..... per.....  
 to take effect..... 191.....

*Employment Division*

Approved..... Dept..... Foreman  
 Approved..... Dept..... Foreman  
 Entered..... Health & Sanitation Dept.  
 Entered..... Cost Dept.  
 Started work..... 191..... New Clock No.....

FORM NO. 36. TRANSFER RECORD OF EMPLOYEE

Blue card, 8 inches wide, 5 inches high

## VOLUNTARY LEAVING OR DISCHARGE

CHECK No. .... Age ..... Date ..... 191 .....

Please pay to ..... Dept. ....

wages for week ending .....

Dept. Head .....

Left ..... Discharged .....

Cause .....

Empl. Agt. ....

*This slip must be signed by Empl. Agt. if employee is leaving.*

FORM NO. 37. EMPLOYEE'S ORDER FOR FINAL PAY CHECK

Orange paper, 6 by 4 inches. See page 183

## REMOVAL ORDER

Name .....

Dept. .... Position .....

Date removal to take effect .....

Cause .....

Date ..... 191 .....

FORM NO. 38. REMOVAL ORDER USED IN A DEPARTMENT STORE

White slip, 5 by 3 inches



## MANAGER PAYROLL DIVISION

Please Discontinue the name of

Registry No. ....

Department  
Division Effective .....

Reason for leaving .....

(See other side)

Qualifications .....

(See other side)

Deduct: .....

*Manager*

Book of Rules..... Company property

Drinking Cup..... received.....

Locker Key.....

Total.....

*Mgr. Emp't and Inst. Dept.*

[OVER]

When filling in the lines marked "Reasons for leaving" and "Qualifications," use only the terms indicated below.

## REASONS FOR LEAVING

Resigned—(state reason)

Left without notice

Discharged	{	Insubordination
		Slowness
		Inaccuracy
		Repeated tardiness
		Repeated absence
		Dishonesty

## QUALIFICATIONS

Good

Fair

Poor (add whether "slow" or "inaccurate")

FORM NO. 39. PAYMASTER'S NOTICE OF EMPLOYEE'S LEAVING

Yellow paper, printed both sides, 5½ inches wide by 4 inches high

LEAVING NOTICE				
Paymaster:		.....191.....		
No.	Dept.	is leaving		
Please settle with h on				
Reason for leaving		Character of Service		
Own accord			Good	Fair
Leave of absence		Work		Unsatisfactory
Laid off		Conduct		
Dismissed		Ability		
Discharged				
Class of work performed				
Note: Make check mark V in space that describes reason for leaving.				
..... Foreman				

Form No. 40. PAYMASTER'S NOTICE AND PERMANENT RECORD OF EMPLOYEE'S LEAVING OR DISMISSAL  
Heavy white paper, 6½ by 4½ inches. See page 171











No. 31 and 32.) These requests are usually made out in duplicate; one copy is forwarded to the pay-roll department and the other is retained by the employment office.

The important matters of transfer, voluntary leaving, and discharge are arranged for by means of the forms numbered 33 to 44 inclusive. Requests for transfers may originate with the employee, the foreman, the department head, or the employment manager. After receiving the approval of the proper authorities, some form of notice such as Form No. 35 is sent to the paymaster. A complete record of these changes is made on Form No. 36 by Form No. 24 (Chart No. 1, page 32).

If the employment department is to investigate cases of discharge and voluntary leaving, some means must be taken to insure that the employee's last pay cannot be drawn without an interview with the employment manager. Form No. 37 is intended for this purpose and must be presented to the cashier before the last pay check is issued.

A large department store uses Form. No. 38. In practice, this is what usually takes place: A department head suggests the removal of some individual from his department. When a transfer can be effected, the matter is settled in that way, but if such a course is not advisable, the employment head makes a formal recommendation for removal to the store manager. With his approval, the removal order goes to the accounting department.

Form No. 40 is used by a firm that allows its foremen to retain the power to discharge. No adequate provision is made for investigation of discharge or voluntary leaving.

Numbers 41 to 44 are suggestive of record forms

that are intended to summarize the work of the employment office. As in the case of all other forms, it is essential that these record sheets be kept as simple and as few in number as possible. At the same time, it must be borne in mind that the collection of complete data with a view to correcting faulty conditions, if they exist, is one of the primary functions of this department; it will probably be wiser for the manager to err on the side of collecting too many statistics than to find his records incomplete in important particulars when he comes to the study of his problems at the close of the year.

Mr. J. W. Bancker, Assistant General Superintendent of the Western Electric Company of Chicago, writing in *The Annals* for May, 1916 (page 270), has this to say of reports:

Reports are of value in showing general conditions and tendencies. In developing the reports issued by the employment department we have endeavored to have them show the volume of work handled and the turnover and stability of the force. The forms shown below are those of reports issued regularly and in order that the figures may be comparable as between months the data is filled in each month on a tracing containing the figures for the previous months and blueprint copies made and distributed to those interested.

#### REPORT M-428.8

Report M-428.8 is of value in showing the net gain on the pay roll in relation to the total number of employees, also the number of reinstatements and the percentage of such reinstatements to the total number employed. These reinstatements cover employees who have previously left the service of the company and have been reemployed. The report is also of value in showing an analysis of the employees leaving the service of the company by the general classifications which we use. This information is tabulated from the leaving notices, form II. W. 421, previously referred to.

Western Electric Company, Inc.,  
Employment Department.

# REPORT OF WORK IN EMPLOYMENT DEPARTMENT.

	January.		Feb.	Total
			to Dec.	for Year.
	Men.	Women.	Total.	
Applicants Interviewed				
Employed				
New				
Reinstatements				
Total				
Did not Report for Duty				
Net Addition to Pay Roll (1)				
Left Employment				
Left Own Accord				
Laid Off Lack of Work				
Suspended				
Dismissed				
Discharged				
Deceased				
Leave of Absence				
Pensioned				
Total (2)				
New Gain on Pay Roll (1-2)				
Per Cent Net Gain to Net Addition				
Per Cent Reinstatements to Net Addition				
Transfers between Departments				

## Standard Report No. M-857.2

Western Electric Company, Inc.,  
Employment Department.

## LENGTH OF SERVICE OF EMPLOYEES LEAVING.

Length of Service	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Year
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
Male													
0-2 weeks													
2-4 "													
1-3 months													
3-6 "													
6-9 "													
9-12 "													
1-2 years													
2-3 "													
3-4 "													
4-5 "													
5-10 "													
Over 10 years													
Total Leaving.													
Total on Roll.													
Percentage Leaving.													

## REPORT M-857.2

Report M-857.2 is an analysis of the length of service of employees leaving the company. The report as regularly issued is made up to show an analysis covering the works as a whole, and also by the main divisions of the organization. In addition to the regular reports, special reports of the same general character are made up from time to time for the purpose of studying conditions in particular departments.

## REPORT A-857.1

Report A-857.1 is issued annually and shows the length of service of all employees on the pay rolls as of January 1. As indicated on the report, it shows the number of employees and the percentages to total number of employees for each of the periods indicated for the main divisions of the organization and the works as a whole.

Standard Report No. A-857.1  
January 1, 1916.

Western Electric Company, Inc.,  
Clerical Branch.

## LENGTH OF SERVICE OF EMPLOYEES.

Based on Pay Rolls of January 1st.

Length of Service.	Clerical Branch.		Production Branch.		Operating Branch.		Total.	
	Men. No. %	Women. No. %	Men. No. %	Women. No. %	Men. No. %	Women. No. %	Men. No. %	Women No. %
1 month								
2    “								
up to								
11 months								
1 year								
2    “								
up to								
Maximum								

Probably the most important single item to be studied is the number of employees lost to the company each year through various causes. These figures should

be analyzed by departments and scrutinized with a view to determining the fundamental reasons for unusual fluctuations. Some firms find it convenient to plot these figures on a single sheet, comparing in percentages the turnover in the different departments. It is quite necessary to accompany such a plot with a statement of the total number employed in each department and with an explanation of any exceptional conditions that may prevail.

In ordinary usage the term "labor turnover" has been interpreted to mean the proportion existing between the total number of new employees brought into the organization during the year and the average number employed during the year. Thus, if an establishment that requires on the average 1000 persons to do its work, takes on 1000 new employees in the course of the year without increasing the total number employed, the labor turnover would be said to be 100 per cent. Without some further data, such a statement is of no great significance. A very careful distinction must be drawn between objectionable discharge and leaving chargeable to bad management, and the necessary changes in the working force due to promotion or transfer, sickness, old age, marriage in the case of female employees, death, etc.

The preventable and undesirable changes in employment are the ones that the successful manager must strive to overcome, and it is just this situation that is undoubtedly the most difficult to remedy.

A committee of the Boston Employment Managers' Association with Mr. E. H. Fish, of the Norton Company, Worcester, Mass., acting as chairman, compiled forms No. 45 and 46 as a basis for tabulating labor turnover. These blanks have the distinct advantage of



presenting an analysis of the several types of employees as well as showing clearly the important reasons for leaving. It is only by some such means that the tendency to overrate the ability of an employment manager who allows his foremen to retain inefficient help can be avoided. Form No. 45 is intended to be used by each department as a record of the changes during the month, while Form No. 46 summarizes the turnover in each department of the entire plant over any desired period of time.

The quotations given below are extracts from an explanation of the blanks prepared by the chairman of the committee:

“The classification<sup>1</sup> of learners was adopted because of our feeling that we should face the facts fairly and squarely as to whether we were hiring men whom we expected to train for our own purposes, whether they were men who we suspected had previous experience, or whether we should make a distinction between them and laborers whom we expect to be about equally efficient at the beginning and at the end of their employment. This, too, gives us an opportunity to present to the management of our several companies the number, usually large, of employees for whom some kind of training is needed before they become efficient, because by thus showing this considerable number, it probably will be possible to induce them to set aside certain portions of the shop for specific training of new employees.

“Those who are transferred from another department, because they have failed in the first, should be kept entirely distinct because, while as a matter of fairness to the individual it is usually desirable to give the

<sup>1</sup>“The Tabulating of Labor Turnover,” by E. H. Fish. *The Annals*, May, 1917, page 33.



## TURNOVER

Turnover is the change in personnel brought about by hiring and termination of employment. Many conditions enter into these changes, some of which are beyond the employer's control or influence. Other conditions are largely within the control of the employer and, because of their obvious importance, they demand serious consideration.

Problems relating to personnel are no less vital than problems relating to markets, materials and machinery. Conditions affecting turnover lie at the heart of all personnel problems. Intelligent consideration cannot be given these conditions without knowledge of facts and such knowledge depends upon accurate data.

It is impractical merely to group or express in total percentage, all the factors entering into turnover; these factors are irreconcilable. It is of value to know the percent of exits but it is of more value to know the causes of those exits; therefore a detailed analysis of reasons underlying termination of employment becomes valuable.

With the above in mind and appreciating the necessity of uniform records if future discussions of the problems of turnover are to be of value, the Employment Managers' Association of Boston has adopted this provisional form and method for computing turnover. The Association anticipates its later revision in the light of experience to be secured through its use.

As a convenience and economy to employers this form is printed and carried in stock by the Library Bureau, Boston, Massachusetts.

## PLANT SUMMARY

ENTRANCES	NUMBER	PER CENT
1 Employed	_____	_____
2 Re-employed	_____	_____
3 Transferred	_____	_____
4 Total Entrances	_____	_____

EXITS	NUMBER	PER CENT
5 Left of Own Accord	_____	_____
6 Discharged	_____	_____
7 Laid-off	_____	_____
8 Transferred	_____	_____
9 Unavoidable	_____	_____
10 Total Exits	_____	_____

Deduct Transferred and Unavoidable (8 and 9) \_\_\_\_\_

Balance = Plant Turnover \_\_\_\_\_

REMARKS:—

COMPANY:

MONTH \_\_\_\_\_

YEAR \_\_\_\_\_

Form No. 46.—Plant Record, Back



failures another opportunity in some other department, the percentage of them who make good should be kept track of, and that cannot be done unless we know the actual number who were transferred under such conditions.

“Under the head of ‘Transfers on Account of Departmental Fluctuation,’ we take care of cases where one department finds itself temporarily out of the normal amount of work through lack of delivery of material, or for any other reasons, and the people employed there must be taken care of in some other department instead of being allowed to drift outside.

“Probably in almost every concern, the largest number of assignable reasons will be those relating to wages. It was thought that experience might show a certain more or less definite percentage of people leaving on account of their wages, which might indicate a danger point, and that salaries or wages should be increased.

“Under the heads of ‘Heavy, Wet, or Dusty,’ etc., of course are included conditions which are oftentimes inherent in the business itself and must be faced. Sometimes, however, the fact that we are able to show to the management that a larger percentage of people than they had supposed leave us on account of these reasons, may indicate to them the desirability of spending considerable sums of money in remedying conditions which they had been inclined to think were of comparatively little importance. Under ‘Ill Health’ are supposed to be included only such cases as are contracted outside of employment, for such few cases of sickness as come about through the fault of the company itself, or through defects that they might easily remedy, should be classified under ‘Transfers for Physical Reasons.’

“Under the head of ‘Location’ we have made two divisions, one ‘Due to the Family Moving from Town,’ which of course, usually applies to the children or to the younger people in the family. We usually consider that when the head of the family is the one who takes the initiative in leaving town that it must be for some other reason, and will be classified under another head. Under the head of ‘Housing Conditions,’ we place the leaving of employees because they are unable to secure the kind of tenements or houses which they desire, or cases which often happen in rush times of their being entirely unable to find accommodations at all. We place this under the avoidable causes, because it is something which concerns usually face in locating their plants out of the center of large cities.

“Under the subheading of ‘Men Laid Off,’ we have made the following divisions:

“1. To decrease the force, probably made necessary by lack of work, although it might be due to the fact that additional machinery had been installed which required less labor to operate, or because the men already on the job had become more efficient and were able to do the work in a smaller group.

“2. Those laid off for physical reasons include those who have become aged in the service of the company, and those, who, as a result of some sickness, or accident, had become incapacitated. It seems, however, that very few should be placed under this column, as a man who has become incapacitated as a result of the work which he has done seems to be a proper object for further care by the company, either by being placed in some easier, less active job, or by being placed on some sort of pension roll.



“At the bottom of the sheet, it will be seen that there is provision made for getting the percentage of leaving for each one of a number of different causes. There is first a footing for the total of each individual column. By dividing that total by the average number of employees concerned, we arrive at the percentage leaving for that particular department for that individual reason, and for the time covered by the sheet. Then the next totals are for the totals of the subheadings: that is the new entrances, the re-employed and transferred, those who left of their own accord, those who were discharged, those who were laid off, those who were transferred, and the unavoidable. Then the third set of totals and percentages is for those coming and those leaving, so that if this is applied to the whole plant, the percentage of those leaving over the average number employed will give us the total turnover for the whole plant. The sheet gives us a classification as fine as anyone probably will require, so that a study of these sheets will give a bird's-eye view of the whole condition, and as finely subdivided an opportunity for study as can be wished. The recapitulation of these figures by departments and by plants is provided for, as may be noticed on the back of the two forms.”

Aside from the intrinsic value of this particular piece of work, the example of this committee is worthy of careful consideration. It is through just such co-operative efforts that hopeful solutions of our labor problems can be expected. So long as executives take the selfish attitude that progressive ideas or new wrinkles in management must be guarded as trade secrets, there can be no real advancement. Many executives have adopted the very much broader and saner point of view

that regards the total gains from co-operation with others, with open discussion and a fair amount of publicity, as incomparably greater than the small losses due to a competitor adopting some of the firm's pet methods.

## CHAPTER XI

### RETAINING THE WORKER: A SUMMARY VIEW OF LABOR TURNOVER

**D**URING an interview with the superintendent of a textile Mill in a large New England city, a question was raised as to the number of changes in employees during the year. The reply came with easy assurance, "There are almost no changes whatever. We have scores of people in our plant who have worked for us for years. Working conditions are as good as we know how to make them. Our employees are well satisfied with their present wages and there is practically no discharge. In fact, there are no reasons for a large turnover, and, while I have no figures to show it, I feel confident that our employment fluctuations are a negligible quantity."

The company employed about 850 persons, about half of whom were women and girls. The product was confined for the most part to two or three lines, all of them commanding a ready and fairly stable market. Storage at certain seasons of the year enabled the plant to run at capacity at all times. Health conditions were quite satisfactory, much better than in the ordinary run of textile mills. Evidence of good spirit between the management and the working force was frequently noted. Wages were fairly good and there was little competition in the labor market because the textile mills were the only important industry in the city. Attention had been given to training women and girls in at least one department.

These were sound reasons for the superintendent's statement, but there was, too apparently, another set of circumstances whose implications he refused to admit. All hiring, discharge, transfer, and the majority of promotions and wage increases were in the hands of foremen. A large number of the workers were of foreign birth. A considerable percentage could not talk English, and many of them had taken no steps toward naturalization. The case was cited of one department where it had become necessary to promote a man to a supervisory position requiring the keeping of certain records. He could not read a word on the blanks to be filled out, but proved capable of recording the figures after a mechanical, rule of thumb method. Doffer boys faced the alternative of staying at the same task for a lifetime or of seeking employment in another mill. Transfers were rarely or never permitted. Wages were paid on a simple piece work basis with no form of bonus or efficiency reward. Complaints were not expected and suggestions were never encouraged. "We thought of making some arrangement for receiving complaints and suggestions, but concluded it would be a nuisance. The foremen can take care of all that well enough." Conferences of foremen or department heads were unknown. No figures had ever been collected regarding the cost of changing employees or the number of changes occurring.

From all the data available it would appear that the superintendent was far too sanguine. As compared with other establishments of about the same size, it seemed practically certain that his plant was suffering a serious waste on the human side of its management. Scores of superintendents and managers still share his point of view, but happily this attitude is one that is

rapidly giving place to a better conception. There is abundant proof that all large plants, unless they are actually diminishing their output, must expect annually to take on new employees amounting to at least 25% to 30% of their average payroll. The usual concern can be expected to carry about twice as many names on its payroll as are needed at any one time to fully man the organization. Estimates of the cost of taking on new employees and training them up to the common standard of efficiency as workers vary between wide limits depending upon such factors as the nature of the task, the condition of the labor market, and the type of employee available. \$30 to \$100 per person is a safe estimate; some firms have placed it much higher with good arguments to back their contentions.

Because of the difficulty attendant upon collecting data, very few figures are available bearing upon either the amount of drifting of employees from one plant to another or the cost of selecting and training employees. It is not uncommon to find plants that have no source save the lists of names on the payroll from which information regarding the changes in employment can be derived. Transfers, promotions, layoffs, voluntary leaving, and discharge are inextricably confused. When a really searching examination of the cost of changing employees is attempted, the factors to be taken into account are so numerous and so complex as to render the investigation not only wearisome but prohibitive in expense for many firms.

The first published record of any investigation of these questions on a large scale is contained in a paper by Magnus W. Alexander,<sup>1</sup> head of the training schools of the General Electric Company. His figures repre-

<sup>1</sup> See Chapter XII, page 217.

sent conditions for the year 1912 in 12 American factories varying in size from 300 to over 10 000 employees. From the figures given in the table below it is apparent that the group of firms under consideration engaged about six and one-third times as many persons during the year as were necessary to account for the permanent increase in the total working force. In other words, for every employee added to the working force, five were allowed to leave or were discharged.

Employees on payroll at end of 1912.....	43 971
Employees on payroll at beginning of 1912...	37 274
Total increase in working force.....	6 697
Employees hired during 1912.....	42 571
Total increase in working force.....	6 697
Employees hired in excess of required increase	35 874

According to Mr. Alexander's conclusions, at least 22 031 of these changes were unnecessary.

By recourse to mortality tables, government statistics, and the experience of mutual benefit associations in factories, he secures the following tentative factors applicable to workers in general:

Annual death rate.....	1%
Sick, requiring temporary or permanent replacement .....	4%
Withdraw for unavoidable causes or are discharged for good reasons.....	8%
Temporarily employed due to fluctuation in production.....	8%
Total annual loss.....	21%
Reasonable efficiency of an employment department .....	80%



It would follow from these figures that, without any permanent increase in the working force, an allowance of 29.7% <sup>1</sup> of the number employed at the beginning of each year would be required to account for unavoidable changes in personnel during the year. A turnover larger than 30% would on these grounds appear to be questionable from the standpoint of efficient management.

To arrive at an estimate of the cost of training these new employees, they were first roughly classified on the basis of the training required for proficiency. The expense was then distributed among these items:

- (a) Clerical work in connection with the hiring process.
- (b) Instruction of new employees by foremen and assistants.
- (c) Increased wear and tear of machinery and tools by new employees.
- (d) Reduced rate of production during early period of employment.
- (e) Increased amount of spoiled work by new employees.

By summing up the expense incurred in training each group, Mr. Alexander finds a total of \$831 030, or an average cost of over \$37 for each of the 22 031 persons apparently unnecessarily engaged.

One of the interesting features of the estimated cost of turnover given in this paper is the assignment of

<sup>1</sup> Replacement of initial force=21% of original force	
on 80% basis.....	=26.25%
Replacement of replacement= $\frac{1}{2}$ of (21% of replacement on 80% basis).....	= 3.44%
Total .....	=29.69%

a total of \$73.50 as the amount needed to replace a machine operative requiring only a moderate degree of skill. \$33 of this amount is due to reduced production, while \$20 is paid out for instruction. Managers were prepared to accept a cost of \$48 for hiring and training highly skilled mechanics, or the lower figure of \$8.50 for unskilled laborers, but most firms whose turnover among machine operatives is large had yet to realize the importance of certain of the factors here emphasized for the first time.

Mr. John M. Williams, Secretary for Fayette R. Plumb, Inc., gives the following account of an effort to determine the cost of turnover in a single department:

"The department in question is run on a piece-work basis and we have a plan whereby we pay each workman a day rate, in addition to a piece rate, until such time as he becomes efficient enough to earn a fair week's salary, which in this department is about six weeks, although to reach the full pay of an expert worker takes twelve weeks.

"Our basis is as follows:

"The first week we pay thirty cents per hour flat.

"The second week we pay twenty cents per hour and in addition pay for all production he turns out on the basis of regular piece rates of such production.

"The third week we pay fifteen cents per hour on the same basis.

"The fourth week we pay twelve cents per hour on the same basis.

"The fifth week we pay eight cents per hour on the same basis.

"The sixth week we pay five cents per hour on the same basis.



Outdoor Recreation  
During the Noon Hour



A Popular Game  
at the Clothcraft Shops,  
Cleveland, Ohio

“At the end of that time the man should be self-supporting. We credit this man with all work turned out, and yet our records show that such a man costs us, in excess day work charges, the cash sum of \$42. This, however, is only part of the cost, as in this particular department the overhead expense is 130 per cent., or for every dollar we pay in actual productive labor we pay \$1.30 for unproductive expense, such as foremen’s wages, instructors’ wages, inspectors’ wages, power, heat and light, repairs to machinery and fixtures (belts, shafting, benches, frames, etc.), oils, grease and kindred items and expense materials that have no connection with the actual material in the tools, such as emery, grindstone, files, hand tools, etc.

“In this department a skilled employee makes \$24.00 per week and (on the basis of unproductive factory expense of 130 per cent.) it costs \$31.20 additional expense for his production. Our records show that a new man will have an average earning power of only \$10.00 per week over a period of the first 6 weeks. For each skilled man who turns out \$24.00 worth of productive work per week we have an overhead expense of \$31.20 in this department. Now for this \$31.20 we secure from a skilled worker a certain number of pieces of productive work represented by his earnings of \$24.00 per week. From a new man the average for 6 weeks is less than one-half the work turned out by a skilled worker, as shown by his average earnings of \$10.00 per week.

“It is not fair to say that this man turning out only \$10.00 of productive labor will cost us as much in unproductive factory expense as the man who turns out \$24.00 of productive labor, but there are certain charges that must be assumed, that can properly be figured on

the basis of a man charge, rather than a charge to a unit of production.

“The only credit the new man would have would be in expense materials, that is, materials such as emery, grindstones and kindred items, where the greater the production, the greater consumption of such expense materials should be. This is based on the assumption that the learner will not use more of such expense materials in proportion than the experienced man, although it is a well-known fact that this is not correct. A learner always uses more expense material per unit of production than an experienced man.

“In this department the factory expense materials are 50 per cent. of the total factory expense charges, and in our figures we are going to disregard any excess charge for the extra amount of materials used by the inexperienced man. This, however, leaves us with 50 per cent. of the unproductive expense of \$31.20 which we pay for the \$24.00 production of the experienced man, or \$15.60 which we must charge to the \$10.00 production of the new man. This charge of \$15.60 only covers such expense as foreman, instructors’ and inspectors’ wages, power, heat and light, repairs of all kinds, etc., or such expenses as must be assumed by the man unit no matter what his production is. In other words, it costs as much in such expenses for the \$10.00 production as it does for the \$24.00 production.

“On the basis of an expense of \$15.60 for a \$10.00 production the percentage is 156 per cent., instead of 130 per cent., we pay for the \$24.00 production, or a net excess cost to us of 26 per cent., or \$2.60 per week, or for 6 weeks an excess of \$15.60. During the following 6 weeks, which complete the 12 weeks we figure are necessary to produce an experienced man, this excess



cost becomes less due to increased production, but if we cut it in half it is 6 weeks at \$1.30, or a total of \$7.80.

“These three amounts (\$42, \$15.60, \$7.80) total an excess cost to us of \$65.40 to break in a new man in this one department. These figures are based on the assumption that every man we hire stays with us long enough to become an experienced man, but our records show that we hire 6 men for this job before we obtain one who stays with us long enough to become skilled. If we added to the \$65.40 the actual cost of breaking in and training the five men who do not stay, the final cost to us of replacing an experienced man with a green man, whom we have to train, would be so much higher as to be staggering. As a matter of fact our records of total excess cost in this department, not analyzed as I have done, but taken in bulk and divided by the number of men trained over a given period, show the final cost to us per experienced man to be over \$100.00.

“In this analysis I have purposely left out of consideration all expenses, such as interviewing and hiring men, loss in defective work, and have charged nothing for money invested in equipment which we lose on account of low production. You may not have the same plan of payment, but by taking any plan you have and figuring in all collateral charges, such as we have ignored, you will find that the average of \$40.00 per man, mentioned by various authorities, is extremely low.”

Judging from the estimates of the few firms who replied to the writer's questionnaire (see chart facing page 32) Mr. Williams' figures would seem to be reasonably conservative. On the basis of even \$25 per employee, the lowest estimate made, our annual losses from this source are appalling. No reliable figures have been compiled on the total turnover for the United

States, but some suggestions may be deduced from the extent of the work carried on by the Division of Information of the United States Bureau of Immigration. The total operations throughout the country of this federal labor bureau, including its co-operative activities with the state and municipal employment offices of New York, are summarized in the table given below :

OPERATIONS OF THE DIVISION OF INFORMATION, BUREAU OF IMMIGRATION,  
MAY, 1915, TO DEC., 1916<sup>1</sup>

YEAR	Number of Applications for Help	Number of Persons Applied for	Number of Applicants for Places	Number Referred to Employment	Number Actually Employed
1915, May to Dec., 8 months. . . .	8 176	42 235	111 909	40 776	37 660
1916, 12 months	72 419	225 663	255 373	175 928	149 954

These statistics represent the work carried on by 55 offices in as many large cities.

If we take the number of people applied for as the basis, 225 663 persons in 1916, and multiply by the conservative estimate of \$30 for selecting and training each new employee, we have the astounding total of \$6 769 890. An analysis made by Boyd Fisher of turnover figures for 1916 in 57 Detroit plants throws further light on the number of workers involved. The average turnover for the group of plants was found to be 252%. Mr. Fisher says of his analysis: "These figures, of course, are very high because labor conditions have been unprecedentedly bad. The figures, however, are not as high as they would be if they did not include the comparatively low averages of plants having employment departments, as well as plants which allow foremen to do their own hiring and firing. An analysis of plants having labor de-

<sup>1</sup> Adapted from table, page 211, *Monthly Review of the U. S. Labor Statistics*, Feb., 1917, Vol. IV, No. 2.

partments shows that, roughly averaged, the plants having no employment department hired three men to every two hired by those which did have employment departments.

“I do not attempt to give more exact figures because I am somewhat skeptical of the correctness of many of the reports which came to me; particularly from plants that have no regular employment department. I suspect that if we had entirely reliable figures from all plants the record of those having no employment departments would show up even worse than they do.”

Some interesting figures have been collected by the New Jersey State Department of Labor and Statistics. Data are presented to show the actual output of 2 556 firms as compared with their production if they were operated at capacity. For the year 1912, considered a normal industrial year, these concerns averaged only about 74% of their total capacity, thus entailing an annual loss of \$363 000 000.

It is certainly safe to assume that the total annual cost of unstable employment is exceedingly large and of such vital importance as to demand careful attention because of its economic aspects alone.

From a social standpoint the question is equally grave. A thorough analysis of the situation brings us at once face to face with some of the most fundamental problems of the time. One of the best statements of these issues is to be found in the Supplement to the *Annals* for May, 1916, entitled “Steadying Employment.” It was first published by the City of Philadelphia as the report of Professor Joseph H. Willits to Director Cooke of the Department of Public Works, and is the result of nearly a year’s careful investigation of Philadelphia’s labor conditions. Professor Willits

concludes that there exists in Philadelphia as in most industrial centers, "a serious unemployment situation—firmly rooted, growing, detrimental to employer, worker and community, even in the best of industrial years."

The city's worst offenders in producing employment changes, and thus finally unemployment, were found to be the textile industry, especially the manufacturers of lace and lace curtains, carpets, cloth, and hosiery, the clothing industry, manufacturers of electric and steam railway equipment and ships, and the employers of longshoremens and dock hands. Two causes were in the main responsible for permanent unemployment among textile workers:

(1) Trade conditions constantly vary with respect to the demand for certain types of fabric. Products no longer meeting with a ready sale must give place to others. If the firm cannot readily readjust itself, an excess of employees results and long periods of part time employment or unemployment ensue.

(2) Instead of manufacturing standard lines to be stored in slack seasons, most concerns make up goods only on orders. This results in long hours and overtime during busy seasons with intervening periods of partial unemployment or lay offs.

Very much the same causes were operative in producing irregularities among garment manufacturers. Styles change three or four times during the season, and instead of two periods of maximum production every year, it is now the common practice to have a succession of sudden spurts of activity followed by unemployment scattered throughout the year. During the fall of 1914 there were four distinct changes in the style of women's coats and suits.

Relatively few of the operatives laid off were able to obtain any other employment, a situation which has been made much worse by the change from two long dull seasons when many workers were laid off, to numerous periods of partial activity spent in the factory waiting for an occasional order to come in.

Irregularities of employment in the group of industries supplying equipment to railroad and steamship companies are ascribed to the practice of these companies of buying in large quantities during favorable seasons. Over 40 000 persons are engaged in these plants, a number sufficiently large to affect very seriously the general prosperity of the city.

The difficulty of securing employment during the winter months is greatly accentuated in Philadelphia and Baltimore because of their proximity to the large fruit and vegetable districts of South Jersey, Delaware, and Maryland. Every summer thousands of laborers, chiefly Italians, take their families to work in the truck gardens, berry fields and canneries for a season of two to five months. With the coming of fall, these laborers return to add to the throngs of job seekers who are being laid off from the city's slackened industries.

Conditions in Philadelphia are fairly representative of other centers. Each city has special unemployment problems of its own, but on the whole very much the same conditions obtain throughout the country. The Federal Industrial Relations Commission recently pointed out that in sixteen occupations of the cloak and suit industry of New York City the maximum number of employees during any week of the year was only 1 952. The actual number on the payrolls, however, was about 4 000. Reliable authorities have estimated that every year in normal times there are over 3 000 000



able-bodied men out of work for at least three months.

Professor Willits enumerates some of the ways in which this uncertainty of employment affects the workers. The most important results may be summarized as follows:

(a) A serious reduction of the wage scale. Estimates of yearly earnings based on piece rates, or average daily or weekly earnings are of little consequence. Unless actual figures covering a long period of time are brought to the attention of those whose business it is to adjust wage schedules, numerous maladjustments are certain to occur even with a well-intentioned management. Because the opportunity to use his full energies is not afforded, the man whose income ought to be \$1 000 to \$1 200 really draws only \$500 to \$1 000 per year.

(b) Thrift is not encouraged because incomes are irregular and it becomes impossible for the family to plan its expenditures wisely.

(c) The efficiency of workers is decreased due to irregular habits. A tendency to avoid anything like a steady job becomes manifest.

(d) Men are forced to take anything that offers during dull periods. Workers for this reason grow hopeless and tend to drift into poorer classes of employment instead of seeking advancement.

(e) Social standards are lowered. "A series of interviews with Kensington textile workers is one steady story of used up savings, of increased debts, and of 'half time' for four, six or nine months." Families are forced to break up, crime increases, attendance in the public schools falls off seriously.

(f) Health is impaired. Parents are unable to furnish food, fuel and clothing during the severest winter



weather. "What famine and black plague were to the middle ages, so is unemployment to the modern industrial world."

The principal losses to employers from unemployment and from changing employees may be expected to fall under some one of the following headings:

1. REDUCED OUTPUT—CAUSED BY

- (a) Running at less than capacity.
- (b) Demoralization of the organization.
- (c) Reduced efficiency due to degeneration of the workers in spirit, energy and ambition.
- (d) Lowered efficiency of employees who are laid off for some time. It may take from one to three weeks for a worker to get back to normal efficiency.
- (e) Machines turn out less than the standard amount when operated by unskilled hands.
- (f) Added wear and tear on equipment due to changing operatives.
- (g) Cost of excess plant required because of failure to operate continuously at full capacity.
- (h) Increased amount of imperfect work and greater cost of materials due to inexperienced employees.

2. EXPENSE OF SECURING AND TRAINING NEW EMPLOYEES.

- (a) Clerical work, time of those engaged in selecting employees, advertising, overhead charges of employment work.
- (b) Instruction.

3. INABILITY TO REDUCE OVERHEAD CHARGES, SUPERVISORY FORCE, INSTRUCTORS, ETC., TO A MINIMUM.

## 4. EFFECT ON GENERAL MARKETS.

(When unemployment is widespread, many firms are likely to suffer because of the reduced purchasing power of the community and the general feeling of a lack of confidence in financial security.)

Before these conditions can be intelligently met, there must be a sustained co-operative effort to discover the real causes and the best remedies. Investigations on a large scale are always helpful and are necessary in that the individual concern is thus brought to see its relationship to the whole problem, but the primary necessity is that each industrial unit make a conscientious survey of its own employment. In the preceding chapters some of the benefits to be derived from centralizing responsibility for employment have been pointed out. None of these is of greater significance than the opportunity afforded for a scientific analysis of the factors determining excessive labor turnover and unemployment. The writer has yet to hear of a firm that has entered upon a campaign for improving its methods in this field without reaping ample benefits. It has been the uniform experience among the firms visited or questioned that the establishment of an employment department has resulted almost immediately in changes for the better not only in the volume of labor turnover, but in numerous other directions affecting the efficiency of every organization. Through better knowledge of its own problems, the plant is much better qualified to co-operate with other concerns in meeting common difficulties. We are only faintly commencing to realize the part to be taken by municipal, state and federal governments in dealing

with unemployment. Legislation regarding such matters as the conduct of public work, the regulation of employment bureaus, industrial insurance and pensions, and the encouragement of public charities ought to be based on a very much better understanding of the basic facts upon which policies ought to rest.

Mr. Boyd Fisher, Vice-President of the Detroit Executives' Club, has prepared a thoroughgoing statement of the most important means so far devised for reducing labor turnover. The summary of his suggestions, quoted in part below, embodies the successful experience of numerous large concerns throughout the country. The methods therein named are to be highly recommended as a basis for further study and experiment by managers who desire seriously to attack this problem.

## HOW TO REDUCE LABOR TURNOVER

### 1. PRELIMINARY MEASURES:

*a*—Attempt to learn true cost of turnover in your plant in order to know how much you can afford to spend to eliminate it.

*b*—Keep adequate records as means of analysis of sources and causes of turnover.

(1)—Historical and statistical record separate for each employee including date of employing or transferring, rates, earnings, bonuses, defective work, complaints by or against man, absence, tardiness, periodic certification of foremen, date of quitting and reasons.

- (2)—Turnover by departments, by causes, by weeks and months and years, and by classes of skills.
- (3)—High and low earnings by departments.
- (4)—Defective work by departments.
- (5)—Absence and tardiness by departments.

## 2. FUNDAMENTAL REMEDIES:

### *a*—Hire the right men for the jobs.

- (1)—Work up good application list which is a “prospect file” by vigilant search of sources of supply, by industrial census of your vicinity, by courteous and hospitable treatment of applicants at all times, and by getting a good name for your factory even from men who have quit you.
- (2)—Using your present work force as a “prospect file,” co-operate with agencies for industrial education, supplementing them with apprentice training, to build up a system of promotion and transfer.
- (3)—Secure time to examine new applicants thoroughly by receiving advance notice of need and by using adequate assistance in employment department.
- (4)—Hire in accordance with written specifications for each job, prepared at leisure, and after due consultation and criticism.
- (5)—Examine physically with view both to general fitness, to suitability for specified job, and to need of later up-building.
- (6)—Visit homes of desired applicants.
- (7)—Check up records of previous employments.

- (8)—Hire only those who can earn an adequate wage.

**b—Pay an adequate wage.**

- (1)—Study cost of and facilities for decent living for each workman and use results in setting base rates.
- (2)—Give special study to cases of inefficient workmen, to see if money troubles are affecting them.
- (3)—Centralize and pay off at discount, debts of overburdened workmen.
- (4)—Promote mutual aid association.
- (5)—Establish legal aid bureau.
- (6)—Pay weekly.
- (7)—Discharge alcoholics.
- (8)—Instruct in proper use of income.
- (9)—Encourage thrift and home-building.
- (10)—Where special causes for increased living cost obtain, attack them, as by co-operative stores, housing measures, etc.

**c—Provide steady work.**

- (1)—Give piece-workers steady flow of material during the day, by proper scheduling system.
- (2)—Regularize production throughout the year to minimize lay offs and shut-downs.
- (3)—Abolish the annual physical inventory, in favor of perpetual inventory with continuous checks.
- (4)—Make repairs promptly and provide a sufficient reserve supply of tools.

*d*—Don't fire hastily.

- (1)—Check up foremen whose departments show high turnover records through men's quitting.
- (2)—Don't let foremen discharge at all.
- (3)—Give unsatisfactory men at least one chance through transfer.
- (4)—Establish employment committee to review cases of discharge where men appeal.
- (5)—Establish foremen's club to study ways of getting along with men.
- (6)—Interview, before paying off, men who quit voluntarily.

### 3. SUPPLEMENTARY REMEDIES:

*a*—Start new men right.

- (1)—Make clearly understood agreement as to starting pay and schedule of advances.
- (2)—Introduce new men to bosses, to fellow workers, and to physical surroundings, and acquaint with rules and facilities of plant.
- (3)—Instruct men thoroughly in new task.
- (4)—Advance money or meal tickets to beginners short of funds.
- (5)—Help beginners speedily to get on piece or bonus rates.

*b*—Promote physical efficiency.

- (1)—Establish physical department.
- (2)—Examine all workmen periodically and provide machinery for following up those found to be defective.
- (3)—Provide adequate light, heat and ventilation.



- (4)—Reduce noise, dirt, and noxious odors and fumes.
- (5)—Purify oils, waste, and other supplies.
- (6)—Purify drinking water.
- (7)—Provide sanitary lockers, wash rooms, and toilets.
- (8)—Insist upon good teeth and good eyes by using, at least on part time, the services of a dentist and an oculist.
- (9)—Have nurses or doctors visit those kept home by illness.
- (10)—Provide mid-workday meals at plant.
- (11)—Provide good tools and fatigue minimizing equipment.
- (12)—Shorten work-hours while securing fair output.
- (13)—Provide at least three rest periods during the day.
- (14)—Arrange for yearly vacations with pay for all employees. This can be on the basis of an efficiency record or punctuality record.
- (15)—Promote athletics.

*c*—Foster good habits.

- (1)—Investigate causes of unexcused absence.
- (2)—Fix strict penalties for tardiness and unexcused absence.
- (3)—Bonus regular attendance.
- (4)—Establish pay system that encourages and rewards accuracy, high output and punctuality.

*d*—Give all employees a hearing.

- (1)—Hear complaints at all times, no matter how put forward.

- (2)—Hold regular shop meetings by departments and by divisions to hear men's ideas.
- (3)—Establish system for considering written suggestions from men; and rewarding with commendation, prizes, or promotion, all thought worthy, and acknowledging all such suggestions without exception.
- (4)—Encourage all forms of self-directed organization, whether of athletic, social, or co-operative enterprises—and provided such organization is not subject to the orders from persons outside of your plant and contrary to its interests.

*e*—Make work in your plant a sufficient career.

- (1)—Establish system for granting unasked-for pay increases as deserved.
- (2)—Discover ambitions of men for future transfers and promotions.
- (3)—Help train men to new tasks.
- (4)—Transfer with some liberality.
- (5)—Encourage men to improve general education by reimbursing for outlay on courses of study as completed.

*f*—Provide for future of all workmen.

- (1)—Purchase group insurance for all workmen.
- (2)—Pension disabled or superannuated employees.
- (3)—Share profits on some form of stock-sharing basis, possibly in lieu of pension scheme.

## CHAPTER XII

### SELECTED BIBLIOGRAPHY OF EMPLOYMENT MANAGEMENT AND RELATED TOPICS

BY JOHN M. BREWER AND ROY WILLMARTH KELLY

ALEXANDER, MAGNUS W. "Waste in Hiring and Discharging Employees." *Scientific American Supplement* No. 2041, Feb. 13, 1915, pp. 102-103.

A statistical study of preventable waste, with proposals for remedies, by an experienced factory manager.

— "Measuring the Worker's Physical Fitness for His Job." *Industrial Management*, Vol. LII, No. V, Jan., 1917, pp. 493-503.

A popular discussion of the need for physical and medical examinations and the methods in common use.

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE.  
"Personnel and Employment Problems in Industrial Management." *Annals of the Academy*, Vol. LXV, No. 154, May, 1916. Editors MEYER BLOOMFIELD and JOSEPH H. WILLITS.

Contains over thirty important articles by employment managers, factory superintendents, educational leaders, and special investigators. The best collection of articles obtainable on the subject.

Part I.—The Place of the Human Element in Industrial Management.

Part II.—The Functionalized Employment Department.

Part III.—Unnecessary Hiring and Firing of Employees.

Part IV.—The Securing, Selection and Assigning of Employees.

Part V.—The employee at Work.

— “Stabilizing Industrial Employment.” *The Annals*, May, 1917, Vol. LXXI, Whole No. 160.

Contains a number of noteworthy papers on the subject of preventing excessive labor turnover through the development of better methods of personnel management. “The methods of this science are not standardized. This volume is edited with the hope of contributing to the forward movement of this science by presenting a description of the work of some plants or individuals who have paid conspicuous attention to this subject.”

Part I.—Survey of Methods to be Used in Reduction of Labor Turnover.

Part II.—The Analysis of Turnover.

Part III.—Reducing Labor Turnover in certain Plants.

Part IV.—Physical Conditions as Factors in Reduction of Turnover.

Part V.—Employees’ Voice in Management.

— “The Present Labor Situation.” *The Annals*, Vol. LXIX, Whole No. 158, January, 1917. 302 pp.

The scope of this issue is indicated by the following partial table of contents. Part I. Certain aspects of the labor situation: Problem of railway trainmen’s wages; case of railroad employees for an eight-hour day; issues in the street railway strike in New York City. Part II. Wages, working conditions, and hours of labor: Present trend of real wages; effects of the legal minimum wage for women; social insurance; welfare service for employees; better living conditions for employees and their relation to stability in employment; immigration and American labor; psychology of floating workers; hours of labor; maximum *vs.* minimum hour legislation. Part III. Public employment bureaus: progress of the public employment bureaus; a Federal labor reserve board for the unemployed. Part IV. Some aspects of collective bargaining: Extent of trade-unionism; labor’s share of the social product; doctrine that labor is a commodity; evolution of legal remedies as a substitute for violence and strikes. Part V. Compul-

sory arbitration or investigation before strikes or lockouts: Advantages and defects of Compulsory arbitration; Canadian legislation concerning industrial disputes; attitude of organized labor toward the Canadian industrial disputes investigation act. Part VI. Voluntary arbitration and conciliation in private businesses: Trend of voluntary conciliation and arbitration in labor disputes; revised protocol in the dress and waist industry; experience of Hart, Schaffner & Marx with collective bargaining; arbitration plan of William Feline's Sons Co.; methods of making local agreements employed by the Pattern Makers' Association of Chicago. Part VII. Fixing hours and wages in the railroads and other public utilities; Federal arbitration legislation; legislation concerning the railroad service; railroad hours-of-labor law; attitude of the railroad brotherhoods toward hours of labor and wages; Government arbitration and mediation.

ANDREWS, IRENE OSGOOD. "The Relation of Irregular Employment to the Living Wage for Women." New York, American Association for Labor Legislation, 1915.

A statistical study of the rate of wages paid and the actual earnings received by women in such industries as paper box, clothing, and candy manufacturing and book-binding, offers convincing proof that the regularity of employment as well as the rate of pay must be considered in minimum-wage discussions if we are to establish a real living wage for women.

ANDREWS, JOHN B. "Health Insurance." Address before the American Association for Labor Legislation, Washington, D. C., May, 1916. 13 pp.

Deals with the possibilities of industrial health insurance, basing the claims upon data concerning the extent and cost of sickness, responsibility for sickness, and the inadequacy of existing health agencies. The paper contains a summary and a discussion of the model bill for health insurance prepared in 1915 by the American Association for Labor Legislation. Bulletin 212 of the U. S. Bureau of Labor Statistics contains a later revision of this bill.



ARNOLD, HORACE LUCIEN and FAUROUTE, FAY LEONE.  
"Ford Methods and the Ford Shops." Engineering  
Magazine Co., Publishers, 1915.

There is a chapter on the Ford Employment office, describing the methods in detail.

AYRES, LEONARD P. "Psychological Tests in Vocational Guidance." In *Bureau of Education Bulletin*, 1914. No. 14, "Vocational Guidance," pp. 33-37. Also *Bulletin* No. E128 of the Russell Sage Foundation. Also *Journal of Educational Psychology*, Vol. IV, No. 4, Apr., 1913, pp. 232-237.

A summary of attempts so far made with the author's hopes for the future. Though many of the writer's statements are sound and illuminating, on the whole the tone is too sanguine, both as to what has been found out and what may be expected in the near future. Many subsequent writers have quoted this article with no attempt to verify its conclusions.

BLACKFORD, KATHERINE M. H. and NEWCOMB, ARTHUR.  
"The Job, The Man, The Boss." Doubleday, Page  
and Co., 1914.

The first six chapters contain some excellent comments on the general features of employment management: the need for a spirit of harmony; ways of bringing about co-operative effort; reasons for the creation of a separate employment office; the benefits to the organization of a centralized system of employment supervision. The remainder of the book sets forth in detail Dr. Blackford's methods of selecting employees. Much of her reasoning is based on unproved assumptions from Biology and other sciences. Even if the generalizations be correct, and assuming that they can ever be substantiated by a sufficient number of cases observed by a large number of competent observers, it is not at all certain that they can be successfully taught to employment managers or vocational counselors, or that their adoption is not likely to work an unnecessary hardship in many cases.



BLOOMFIELD, MEYER. (Ed.) See American Academy, above.

— "The New Profession of Handling Men." *Annals of the American Academy of Political and Social Science*, 1915, Publication No. 928, p. 6.

A statement of the aims and methods of the employment manager, and of the employment managers' associations, with a discussion of the benefits to be derived from this new effort at guidance within the occupation.

Mr. Bloomfield gives an account of the founding of the Employment Managers' Association of Boston and refers to some of the more striking failures in methods now in use for selecting employees.

BUREAU OF LABOR STATISTICS. *Monthly Review*.

A bulletin of current events in the field of labor. Full of important information.

— "Labor Laws and Their Administration in the Pacific States," Whole No. 211; *Labor Laws of the United States Series*, No. 9.

A valuable *résumé* of recent legislation and the administration of labor laws in the Pacific States. There are especially significant chapters on child labor, the safety and health of the worker, and accident compensation.

— Proceedings of Employment Managers' Conferences. 1916. Whole Numbers 196 and 202. *Employment and Unemployment Series*, Nos. 3 and 4.

These two bulletins contain important papers and addresses on the functions and methods of employment managers, read before the Minneapolis Session, Jan., 1916, and the Boston Session, May, 1916. They duplicate in most particulars the material in *The Annals*, May, 1916.

- "Short Unit Courses for Wage Earners, and a Factory School Experiment." *Bulletin* Whole No. 159, Misc. Series No. 6, 1915; by W. A. O'LEARY, CHARLES A. PROSSER, and CHARLES H. WINSLOW.

The first study, by the first two authors named, gives a general and detailed view of what is being accomplished in part-time and short-course work. The second describes the gain to workers and employers in an actual experiment.

- "The British System of Labor Exchanges," by B. LASKER. *Employment and Unemployment Series*, No. 5, Whole Number 206. October, 1916.

An excellent account of the national system of labor exchanges established for the United Kingdom by the Labor Exchanges Act of 1909. The report describes the methods in use, gives the results of an investigation of the various effects of the exchanges on labor conditions, and summarizes the advantages to workers, employers, and to the State.

- BURLINGAME, LUTHER D. "Americanizing a Thousand Men." *Industrial Management*, June 1917, Vol. LIII, No. 3, page 385.

Describes in detail the methods by which the Brown and Sharpe Mfg. Co., Providence, R. I., prevailed upon all but 206 of their 1312 alien employees to take out the citizenship papers for which they were eligible. The article contains many suggestions for a successful campaign of Americanization and education.

- CALIFORNIA BUREAU OF LABOR STATISTICS. "Sixteenth Biennial Report," 1913-1914, State Printing Office, 1914.

Interesting examples of the settlement of labor disputes, data on employment agencies, labor unions, and manufactures. A description of the lumber and cement industries in the state. This is a sample of the vocational importance such reports are likely to assume.

CLARK, W. IRVING, JR., M.D. "Medical Supervision of Factory Employees: Result of Five Years' Experience." *Journal of the American Medical Association*, Jan. 6, 1917. Vol. LXVIII, No. 1, page 5.

Dr. Clark's paper read before the American Medical Association in Detroit, June, 1916, is based on five years' experience in the Department of Health and Sanitation of the Norton Company, Worcester, Mass., an organization employing about 2 800 persons. The paper deals with such important matters as methods of examination, reasons for rejection, defects found in employees that do not bar them from employment, and handling of accidents.

CLOPPER, EDWARD N. and HINE, LEWIS W. "Child Labor in the Sugar-Beet Fields of Colorado." *The Child Labor Bulletin*, Vol. 4, No. 4, Feb., 1916, Part I, pp. 176-206.

An intensive study of seasonal labor in its effects on schooling. Well told.

COHEN, JULIUS H. "Law and Order in Industry." Macmillan Co., 1916.

A review of the protocol which closed the strike of 1910 in the cloak and suit industry of New York City. Describes the cloak and suit industry, the strike of 1910, and the administration of the protocol. A very important part of the book is the portion devoted to the work of the joint board of sanitary control. The protocol should receive the careful consideration of all who are interested in employment problems.

CROZIER, GENERAL WILLIAM. "Scientific Management in Government Establishments." Vol. I, No. 5, *Bulletin of the Society to Promote the Science of Management*.

The introduction of the Taylor system in the Watertown Arsenal in Massachusetts aroused a storm of opposition from labor leaders throughout the country. General Crozier

analyzes the features of the system in use and justifies its retention from grounds of economy as well as fair treatment of the men.

DEARLE, N. B. "Industrial Training." P. S. King and Son. London, 1914.

The report of an extensive investigation of industries employing boys in London. Deals with the manner in which boys enter occupations, how they learn their trades, technical and trade schools, unemployment, wasteful recruiting of trades and occupations, and offers suggestions for improvement. A valuable addition to the literature of this subject.

DETROIT EXECUTIVES CLUB, Welfare Managers Group. "Recommended Standard Practice on Medical Supervision in Detroit Plants." Report presented February 7, 1917. Reprinted in *The Annals*, May, 1917, Vol. LXXI, Whole No. 160, pages 96-106.

The findings of this report have been recommended as standard practice by the members of the Welfare Group of the Detroit Executives Club. Personal visits were made by a committee of physicians and welfare workers to over 30 plants. The recommendations cover a wide range of subjects: sanitation, health and accident supervision, physical and medical examinations, lunch rooms and recreation facilities, factory nurses. Especially helpful are the sections on physical examination and sanitary arrangements.

EMERSON, HARRINGTON. "Efficiency as a Basis for Operation and Wages." The Engineering Magazine Co., Publishers, 1909.

A book on scientific management. There is some discussion of economic principles: the movement is here represented as contributing to the welfare of society and the worker.

EMERSON, HARRINGTON. "The Twelve Principles of Efficiency." The Engineering Magazine Co., 1912.

This is a book devoted to the psychological and moral aspects of management and not merely to mechanical ideals.

Its thesis is that effective organization is necessary to any kind of success, whether in war, business, or ethical undertakings. The twelve principles are as follows: clearly defined ideals; common sense; competent counsel; discipline; the fair deal; reliable, immediate, adequate, and permanent records; dispatching; standards and schedules; standardized conditions; standardized operation; written standard-practice instructions; efficiency reward. The author deals with the need of paying attention to these principles and suggests means of applying them, without, however, working out in all cases the details of the method. The book is full of examples drawn from the mind of a man with wide experience and deep human sympathy.

ERSKINE, LILLIAN and ROACH, JOHN. "The Standardization of Working Essentials." *The Annals*, May, 1916, Vol. LXXI, Whole No. 160.

A practical treatment of standard equipment and methods written by experts. The paper deals with ventilation, dust removal, fume removal, lighting, washing and dressing facilities, drinking water, and lunch rooms.

FACTORY MANAGEMENT SERIES. "Executive Control." A. W. Shaw Co., 1915.

Contains a chapter on "Manning the Organization." Emphasizes the training of executives and deals with the selection of foremen and department heads. The two books of this series here listed are written in a popular style and tend to be superficial. Credence is given, at least by implication, to several very doubtful schemes of selection.

— "Labor." A. W. Shaw Co., 1915.

Based on the work of a number of prominent authorities in the employment field. The following are chapter headings of interest to employment managers and vocational counselors: Hiring and Advancing Workers; Starting Men Right; How to Pick the Best Man; Piece Work; Profit Sharing. See note on *Executive Control* above.

FAUROTE, FAY LEONE. See ARNOLD, HORACE LUCIEN.



FEISS, RICHARD A. "Personal Relationship as a Basis of Scientific Management." *Bulletin of the Society to Promote the Science of Management*, Vol. 1, No. 6, Nov., 1915, pp. 5-25. Also in *Annals of the American Academy*, May, 1916.

Mr. Feiss represents a company under a new type of management that fully realizes the importance of personnel and that has developed several tentative solutions for the problem of caring for the individual workman to the best advantage of every one concerned. The article describes in detail the work of the Employment Department of the Clothcraft Shops at Cleveland, Ohio. Particularly noteworthy features are: Care in selecting employees who are in harmony with the spirit of the organization; supervision of home conditions and health through nurses and physicians; opportunity for transfer and try-out to other departments of the factory; co-operation with the selling branch to keep down lay-offs and dull seasons. All matters which pertain to the hiring, discharge, promotion, transfer, general welfare and development of employees are functions of the Employment and Service Department.

— "Scientific Management Applied to the Steadying of Employment and its Effect in an Industrial Establishment." *American Academy of Political and Social Science, Annals*, Sept., 1915, Publication No. 920.

A brief statement of the methods in use in the employment department of the Clothcraft Shops at Cleveland, Ohio, and the fundamental principles involved. Nearly all of the material is restated and amplified in the longer paper by Mr. Feiss referred to above.

FILENE CO-OPERATIVE ASSOCIATION. "A Thumbnail Sketch of the Filene Co-operative Association." Published by Wm. Filene's Sons Co., Boston, 1915.

A statement of the activities of the association, with a diagram of the organization, and a brief history. This shows the varied activities possible in an establishment.



There is a large share of self-direction in the management of the association.

FISHER, BOYD. "How to Reduce Labor Turnover." An address before the Philadelphia Association for the Discussion of Employment Problems by the Vice-President of The Executives' Club, of Detroit, Mich., Jan. 8, 1917. Reprinted in *The Annals*, May, 1917, Vol. LXXI, Whole No. 160.

A thoroughgoing analysis of the reasons for excessive turnover with suggestions for reduction. Mr. Fisher is an experienced employment manager who has formulated a comprehensive plan for attacking the problem of building up a stable working force.

— "Determining Cost of Turnover of Labor." *The Annals*, May, 1917, Vol. LXXI, Whole No. 160.

A proposed method for computing the cost of changing employees, intended to be made the basis for research. The paper contains a very full outline of the numerous items to be taken into account.

FULD, LEONHARD FELIX. Service Corporations. U. S. Bureau of Education, Bulletin, 1916, No. 34, 73 pp.

The material of the booklet is arranged under four headings: Service instruction in department stores; service instruction of telephone companies; typical service instruction in other industries; service instruction of the City of New York. Although brief, Mr. Fuld's pamphlet is a most helpful contribution to the subject of industrial education. The methods described have been found successful by large corporations. There is much illustrative material in the shape of efficiency bulletins, outlines of courses, and methods of instruction. There is a short section on health supervision and physical education.

FULLERTON, HUGH S. "Getting and Holding a Job." *American Magazine*, Vol. LXXXIII, No. 3, Mar., 1916.

Gives a statement of some of the tests being used in

some Chicago establishments. They are simple psychological tests, but there is so far no proof that they bear a sufficient relation to vocational ability to justify their use. Some other tests described are examples of the kinds of judgments which are unsafe to make in hiring men. Such an article is likely to be misleading.

GANTT, H. L. "Industrial Leadership." *Yale University Press*, 1916.

A collection of five addresses delivered in the Page Lecture Series before the senior class of Sheffield Scientific School, Yale University, in 1915. The book advocates giving ample opportunities for training so that properly qualified leaders may be developed from the ranks of the workers.

Analysis of the tasks, the elimination of wasteful and unnecessary operations, the best possible conditions for work, harmonizing the selling end with production in order to steady employment, accompanied by careful selection of workers and the readjustment of wages, are important parts of the plan. Education by the State is to be provided in matters common to all industries.

The material is very poorly arranged and the reader needs a knowledge of the author's earlier book, "Work, Wages, and Profits."

— "Work, Wages and Profits." The Engineering Magazine Co., Publishers, 1910.

A book on scientific management. Deals with compensation and training of employees, but has very little to say about careful selection. The author is quoted extensively by Hoxie, see below.

GILBRETH, FRANK B. "Primer of Scientific Management." D. Van Nostrand Company, 1912.

A popularly written statement of principles, with an introduction by Louis D. Brandeis.

GOLDMARK, JOSEPHINE. "Fatigue and Efficiency." Charities Publication Committee, 1912.

A study of the effect of factory labor. It is one of the first scientific studies of the problem; an important book.

GOWIN, E. B. "The Executive and His Control of Men." Macmillan Co., 1915, 349 pp.

Professor Gowin's study of executives has three main divisions. The executive is first considered as an individual. Both his physical and mental qualities are analyzed and compared with those of ordinary men. In Part II, the working methods of a leader are discussed. Various means of stimulating and controlling men are passed in review. The remaining portion of the book is devoted to "Limits Upon the Executive." The reactions of his co-workers either increase or limit his power, and it is the problem of Part III to show how the successful executive can overcome apathy or opposition in his working force and secure their best efforts.

The volume considers the term "executive" in its broadest sense and scarcely to be regarded as a work on business methods. Fully as many illustrations are drawn from political or military leadership as from industry.

The psychological aspects of the problem are carefully analyzed both from the point of view of the worker and the leader. Separate chapters are devoted to personality, imitation, suggestion, emulation, interest and apathy, and the energizing level. The reasoning appears to be sound and valuable conclusions are shown.

The practical business man or the student of vocational guidance will find especially helpful the portions of the book devoted to "Organization" (Chap. VII), "Systematic Personal Effort" (Chap. VIII), and "Instruction" (Chap. XIX). The chapter on instruction deals with the various methods in use for instructing employees. A few examples are given, but no statistics or data as to the relative worth of the methods enumerated.

HANUS, PAUL H. "Beginnings in Industrial Education," and other educational discussions. Houghton, Mifflin Co., 1908.

A discussion of the aims, methods, and values of vocational education, with plans used in Germany, and a statement of the needs in Massachusetts and the plans for supplying those needs. The proposals of this book are now being widely adopted.

HENDRICK, BURTON J. "Fitting the Man to the Job." *Harper's Magazine*, Vol. CXXXIV, No. 799, Dec., 1916, pp. 64-70.

A popular statement of the work being accomplished by those firms which have employment managers and attend to the human factor in their establishments.

HOLLINGWORTH, H. L. "Specialized Vocational Tests and Methods." *School and Society*, Vol. I, No. 26, June 26, 1915, pp. 918-922.

An examination of the trials, so far, to find adequate psychological and other tests. Little of value has been accomplished.

HOLLINGWORTH, H. L. "Vocational Psychology." D. Appleton & Co., 1916.

The volume is a summary of the efforts to discover suitable tests, psychological and otherwise, of the individual's fitness for a particular vocation. It is the outgrowth of a course on "Psychological Tests in Vocational Guidance" conducted by the author in Teachers' College, Columbia University.

Under the title, "The Search for Phrenological and Physiognomic Principles," Professor Hollingworth offers arguments and evidence to prove that "the claims of both phrenology and physiognomy are so unsupported, contradictory and extravagant that the vocational psychologist cannot afford to trifle with them." With regard to some psychological studies the author is quite as caustic in his criticism as he is of the "futile attempts to diagnose mental constitution on the basis of bodily structure," but with the important difference that he looks upon the general trend in his own field as very hopeful.

The chapter on "Self-Analysis and the Judgment of Associates" offers some interesting studies on the value of oral and written recommendations and other testimonials of character. Correlation studies of the judgments of several groups lead to the tentative conclusion that persons of average intelligence will agree fairly closely in their opinions of an individual's rank in such traits as efficiency,

originality, quickness and perseverance, but that they will be apt to disagree on such traits as reasonableness, refinement, cheerfulness, and kindliness.

"The Curriculum as a Vocational Test" contains a number of studies which attempt to correlate marks or grades in elementary and high schools with success in college or in occupations, and interest in school subjects with interests and values of later life.

Suggestions are made as to the sort of psychological tests which appear to be most helpful in selecting employees or in choosing a vocation. The strongest objection to extended use of such tests at present is summed up in a statement referring to the incompleteness of the correlation between tests and more direct measures of ability. "From the point of view of the individual who is seeking guidance, or who is accepted or rejected on the basis of his performance in psychological tests, any correlation which is imperfect may lead to occasional injustice and misdirection."

The appendix gives a classified bibliography of vocational psychology, and a number of tests, blanks, standards, and forms.

Professor Hollingworth's book is valuable as a summary of what has been accomplished and should prove a stimulus to better directed effort as well as a safeguard against certain forms of pseudo-guidance offered by commercial counselors.

HOXIE, ROBERT FRANKLIN. "Scientific Management and Labor." D. Appleton & Company, 1915.

The author acted as a special investigator of scientific management for the United States Commission on Industrial Relations and the book is based upon an investigation of the relations between labor and scientific management. An effort has been made to discover and test the claims of the originators of the scientific management movement, Taylor, Emerson and Gantt, as well as to set forth a clear, concise statement of those opposed to it. After arriving at a preliminary statement of the claims of both parties, four months were spent in visiting 35 shops where scientific management had been installed. Personal interviews were held with about 150 scientific management leaders, employers, factory managers, labor leaders, and



others who were intimately concerned with the issues involved.

While much of the book deals with technical matters, it clears up many points that ought to be thoroughly grasped by those who deal in any way with employment problems and is so written as to be easily understood by the ordinary layman. Mr. Hoxie brings out clearly the apparent conflict between forces making for mechanical efficiency in manufacture and those making for human rights. He concludes that scientific management has failed to provide *automatically* for human well-being, as some of its advocates claimed it would. It seems likely that the author has understressed the conditions that obtain in a small group of factories where scientific management has reached its highest development as regards the welfare of employees.

INDUSTRIAL MANAGEMENT. "Employment and Labor Maintenance Department." Monthly articles on employment and personnel problems. *Industrial Management*, formerly *The Engineering Magazine*.

Beginning with the Jan., 1917 number, this magazine, besides its many other features of interest to vocational guidance, offers this department in which employment managers and others discuss ways and means for improving conditions of work.

KEMBLE, WILLIAM FRETZ. "Choosing Employees by Test." The Engineering Magazine Co., 1917. See also articles in *Industrial Management* for Nov. and Dec., 1916, and Jan., 1917.

Mr. Kemble gives an account of a large number of mental and physical tests designed to assist in measuring the applicant's fitness. Many of these tests can scarcely be said to be much more than interesting experiments; their significance and dependability remain to be demonstrated. The book may serve as a stimulation to further research and experimentation, but many of its assumptions and conclusions are not yet verified.

See also our notes on Hollingworth, Kitson, and Münsterberg, and the reference to Psychological Tests on page 91 *et seq.*, Chapter VI.



KITSON, HARRY D. "Suggestions Towards a Tenable Theory of Vocational Guidance." *Manual Training and Vocational Education*, Vol. XV, No. 5, Jan., 1915, pp. 265-270.

Objects to the current conception about the utility of psychological tests, claims that interest is not a reliable guide, and advocates guidance based on facts and monitory in its nature.

— "Psychological Tests and Vocational Guidance." *The School Review*, Vol. XXIV, No. 3, Mar., 1916, pp. 207-214.

Similar to the above article. There are several references to the work of Mrs. Woolley in Cincinnati and to the activities of the University of Chicago. The following are the most important points made and seem entirely sound:

1. Better methods of getting standards are necessary in order to obviate errors arising from taking chance samplings.

2. The single test system does not take into account the subject's ability to improve.

3. The volitional factors are almost entirely neglected.

4. Guidance founded on interests fails because of (a) the volatile character of the interests of most young persons; (b) entire lack of vocational interests; (c) conflicting interest of unmeasurable strength; (d) objective methods of determining interests are undeveloped and subjective methods are unreliable.

5. The true relation of the person to his proposed vocation can only be determined through a thoroughgoing sociological, economic, physiological, and psychological study.

6. After the individual's strength and weakness are known, the counselor's advice should be merely monitory in nature.

LEMON, CHARLES H., M.D. "Medical Supervision of Street Railway Employees." *Journal of the American Medical Association*, Jan. 13, 1917. Vol. LXVIII, No. 2, page 95.

A general discussion of the health and welfare service

carried on by the Milwaukee Electric Railway and Light Co. A campaign of education both within and without the company for the prevention of accidents and a careful preliminary examination with subsequent health supervision, resulted in a reduction of \$100 000 in the cost of injuries and damages, and cut in half the average amount of sickness per man per year.

MASSACHUSETTS COMMITTEE ON UNEMPLOYMENT. "Why Labor Exchanges?" *Bulletin No. 1*, 1915.

"A forecast of the next steps beyond State free employment offices." A convincing statement of the need.

MITCHELL, JOHN. "The Wage Earner and His Problems." P. S. RIDSDALE. Washington, D. C., 1913.

The labor-union point of view, well stated. The counselor must know and appreciate the aims of the unions.

MOCK, HARRY E., M. D. "Industrial Medicine and Surgery: The New Specialty." *Journal of the American Medical Association*. Jan. 6, 1917, Vol. LXVIII, No. 1, page 1.

This article presents some strong arguments in favor of medical examination and supervision of employees. Dr. Mock reports on several important phases of this work. The industry with which he is connected supported in 1916 an eighteen-room office with seven doctors, twelve nurses, and two dentists; 15 151 employees were examined during 1914 and 1915; 13 764 applicants for work were examined during the same period; 5 000 accident cases were reported to the doctor's office in 1915; all figures of sufficient size to indicate an experience of wide scope and far-reaching significance.

MÜNSTERBERG, HUGO. "Psychology and Industrial Efficiency." Houghton Mifflin Company, 1913.

This book sets forth certain laboratory experiments which attempt to link psychology to industry. So far as the present work of the counselor or employment manager is concerned it has no practical bearings. Though Pro-

fessor Münsterberg states in the introduction that "completed investigations do not as yet exist in this field," yet the general tone of the book or the hoped for short-cut methods in hiring men has led many persons to believe that some progress toward discovering aptitudes through psychological experiments and tests had been made. The tests described in this book are supposed to reveal qualities, and it is naïvely assumed that these qualities shown in the laboratory will operate in the complex situations of life. There seems to be no proved relationship between laboratory tests and experiences in the occupations.

NATIONAL ASSOCIATION OF CORPORATION SCHOOLS.  
Third Annual Convention. Papers and Reports.  
1915.

Pages 329-478 deal with the report of the committee on vocational guidance, and with the discussion on that topic. Reference is to the employment rather than explicitly to the school, and an argument for versatility in the occupation is given. "Versatility of employment is the sieve for catching and testing varied abilities." (p. 32.) The volume contains other material of use to the counselor, particularly that in regard to the work of employment managers. See Reilly's discussion, pp. 778-781.

— "Reports of the Committee on Vocational Guidance, the Organic Development of Business, Fourth Annual Convention," 1916.

This report is a description of the kind of management which takes full account of the human factor in commerce and industry. Part I deals with the ideals sought for by the employee, in order to realize fair treatment, co-operation, self-development, and self-respect. Part II describes the necessary machinery to bring about the organization of a central employment and service bureau, job analysis, health help, continued education, promotions and transfers, rectifying of grievances, and management sharing. The report contains examples drawn from plans actually in operation. Part III contains eleven articles and outlines, descriptive of plans and experiments pertinent to the points brought out in the report.

NATIONAL ASSOCIATION OF MANUFACTURERS. "Industrial Education." Report of a committee, H. R. Miles, chairman. 1915. Reprinted by the Bureau of Education, Washington.

Discusses the continuation and part-time plan, and argues for dual control. Legislation in Wisconsin and Pennsylvania is discussed, together with suggested adjustments necessary to be made in factory management. The report presents the point of view of employers willing to foster the education of workers. The Association has issued several other bulletins.

NATIONAL CIVIC FEDERATION REVIEW. "Working Conditions in New York Stores." New York, July 15, 1913, Vol. IV, No. 1.

Under the auspices of the Welfare Department of the National Civic Federation, an investigation was made covering the conditions of employment in 22 different retail dry goods stores and mail order houses employing a total of 38 900 employees. Four topics are considered in the report: I. Welfare activities and recommendations for improvement; II. The length of the work day; III. The vexed problem of women's wages in department stores; IV. The relation of the wage scale to the social evil. The report is commendably concrete, abounding in practical illustrations of existing conditions, and the few statistics are well interpreted. Among the conclusions are the following: Physical conditions on the whole in the modern department store conducive to the comfort of the worker are as favorable as those in any line of trade or industry in this country. Some of the welfare work is really remarkable. Among the occasional wrongs to be righted are: The long work day; slow promotions; insufficient pay of a large class after the apprenticeship period; the fining and docking system; instruction talks and conferences after hours instead of during business hours; inadequate fire protection; indifference or ignorance on the part of many responsible heads concerning high and correct standards of welfare work.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION. "Report of the Minneapolis Survey for Vocational Education." Published by the Society, *Bulletin No. 21*, 1916. Reprinted by the U. S. Bureau of Labor Statistics.

This report is a mine of interesting information for the employment manager or the student of vocational guidance. Nearly a score of large industries were surveyed, including some for women. Trade agreements were worked out, vocational guidance planned, and prevocational studies suggested. The size and character of the book make it unlikely that it will be widely read. Booklets based upon its findings should be prepared for the use of parents and pupils.

This society publishes annual reports, bulletins and other documents valuable to vocational counselors or to employment managers.

— "What is the Smith-Hughes Bill providing Federal grants to vocational education? and What must a State do to take advantage of the Federal Vocational Education Law?" New York, March, 1917, 48 pp.

The first part of the bulletin contains a series of questions and answers intended to bring out the more important provisions of the Bill. A complete draft of the vocational education act follows. Tables show the funds available for each State. There are suggestive chapters dealing with the principles and policies of vocational education and a model bill for enactment by States desiring to avail themselves of the offer of Federal aid.

NEWCOMB, ARTHUR. See BLACKFORD, KATHERINE, M. H.

NICHOLS, ERNEST FOX. "Employment Managers Solving a Business Problem." *The Nation's Business*, Vol. IV, No. 2, Mar., 1916, pp. 14-15, and 17.

A good summary of the difficulties in present methods, the hopeful new attempts to develop better policies, and the duties and opportunities of these important officers.



PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY.

"Conferences of Industrial Physicians," Feb. 17 and May 18, 1916. *Pennsylvania Medical Journal*, Vol. 20, No. 1, Oct., 1916., pp. 1-63.

The record of an important conference dealing with the functions of the industrial physician and the benefits derived by large concerns from his services. Among the topics treated are the following: asphyxiation and suffocation; Pennsylvania laws relating to industrial hygiene; the physically defective in industry; lead poisoning; the workmen's compensation law as it affects the physician; relation of extreme temperatures to the efficiency of the workman; mortality from diseases of the lungs; physical examinations applied to the prevention of accidents; reasonable surgical, hospital and medical services under the compensation act; inguinal hernia viewed as an anatomical defect.

REDFIELD, WM. C. "The New Industrial Day." The Century Co., 1913.

As his central topic, Mr. Redfield takes the proposition that the employees of any factory are worthy of more consideration on the part of everyone concerned than the material product. He believes that in the last analysis whatever makes for the health, happiness and prosperity of the majority of a firm's employees results in economic gain to the firm itself.

In spite of a marked tendency to give support to certain moot political tenets, "The New Industrial Day" ought not to be overlooked as a source of valuable arguments for a better selection of employees, for more careful instruction in the tasks, for a closer personal touch between the management of great factories and the working force.

RICHMOND, MARY E. "Social Diagnosis." Russell Sage Foundation, New York, 1917, 485 pp.

While this book is written primarily for social workers, it contains many points of significance to vocational counselors or to those who must supervise employees. The author is director of the Charity Organization Department



of the Russell Sage Foundation and has had many years of experience in various fields of welfare and settlement work. The volume contains a large number of well selected case studies and experiences that lend a human interest and give a practical bearing to the topics discussed.

The following are suggestive chapter headings:

"Testimonial Evidence": the competence of the witness, his attention, memory, and suggestibility, the response to leading questions; the bias of the witness: racial, environmental, self-interest.

"The First Interview": nature of the task; place of the interview; the recorded experience available as a starting-point; the approach; clues and questions; premature advice and promises; bringing the interview to a close.

"Outside Sources" (of general information): a study of the sources most in use; principles governing the choice of sources; method of dealing with clues.

"Medical Sources": where medical evidence sometimes fails; complementary nature of medical and of social data; social responsibility for early medical diagnosis; methods.

"Letters, Telephone Messages, etc.": blank forms; letters of inquiry; letters of reply to inquiries; technical details; communication by telegraph and telephone (an excellent analysis of the dangers and inaccuracies incident to getting information through these channels.)

In addition to these chapters there are others dealing in great detail with the methods of securing information and the relative reliability of data from such sources as employers, public documents, neighbors, policemen, public officials, the post office, social agencies, and fraternal orders. To the employment manager or to the social worker who has not made a long and careful study of these means of securing judgments on prospective or present employees or charity cases, these chapters will prove nothing short of a revelation in critical analysis and helpful suggestions.

SMITH, CARL E., D. D. S. "Bad Teeth and Their Effect on the Laboring Man's Efficiency." *Journal of the American Medical Association*, Vol. LXVIII, No. 2, page 98.

Describes the results of 30 000 mouth examinations, 98 per cent. showing need of dental attention. Shows the im-

portance of preventing loss of efficiency through toothache, infection from diseased teeth, and the digestive disorders produced by decayed and abscessed teeth.

This paper is followed by an abstract of the discussion on several papers dealing with the subject of Industrial Medicine read before the American Medical Association at Detroit, June, 1916.

SCHNEIDER, HERMAN. "Education for Industrial Workers." World Book Company, 1915. School Efficiency Series.

This is "a constructive study applied to New York City," but lays down principles which apply to all American schools. Particularly interesting are his classification of work as "energizing" and "enervating," his knowledge of psychological conditions of labor (pp. 14-15), his description of a factory town (pp. 10-11), his understanding of methods of instituting co-operative work, and his appreciation, on almost every page, of the social questions involved in conditions of labor.

— "Selecting Men for Jobs." *The Engineering Magazine*, Vol. LI, No. 3, June, 1916, pp. 420-431.

Dean Schneider discusses sanely and effectively the inadequacy for purposes of vocational guidance of the theory of boy epochs, reliance on physical characteristics, and psychological tests. He argues for trying men on the actual job, as can be done in the co-operative plan. In the latter part of the paper, Dean Schneider quotes from his article criticized below, arguing for the theory of types of mind.

— "Selecting Young Men for Particular Jobs." *American Machinist*, April 10, 1913.

An attractively written article about types of men for types of work.

Dean Schneider bases his conclusions on seven years' experience with the co-operative work at the University of Cincinnati and on the results of the observations of about 500 students, who were serving on part-time in manufacture, construction, and transportation. He attempts a

classification of marked characteristics which furnish a rational basis for the broad selection of young men for particular jobs. The writer's own criticisms (partly suggested) on his system appear to be adequate:

1. The list will not apply to younger people since many of them do not appear before 16 to 18 years of age.

2. These characteristics will have different meanings in different vocations and must be interpreted in terms of the vocation to which they are applied.

3. These characteristics are not psychologically basic, but are composed of simpler elements, thus admitting the possibility of a man's being "settled" in some respects and "roving" in others, for example. If life were simpler, and if vocational guidance were easy, the types suggested might be valid, but life is complex, and human qualities are not to be pigeonholed in this fashion.

SCOTT, WALTER DILL. "The Scientific Selection of Salesmen." *Advertising and Selling Magazine*, Vol. XXV, Nos. 5, 6, and 7, Oct., Nov., and Dec., 1915.

"A series of tests made by corporations representing the most important development in sales management in the past dozen years." The tests are of many kinds, and are based on mental cleverness, the theory being, no doubt, that there is a high positive correlation between cleverness and ability as salesman. The tests themselves were tested by examining expert salesmen.

SYDENSTRICKER, EDGAR. See WARREN.

TARBELL, IDA M. "New Ideals in Business, An Account of Their Practice and Their Effects Upon Men and Profits." The Macmillan Company, 1916, 339 pp.

A volume on welfare work. Deals with many topics of vital importance to the employment manager: safety and health movements; campaigns against the use of intoxicants; housing; hours of labor; wages; steadying of employment; education; etc.

TAYLOR, FREDERICK WINSLOW. "The Principles of Scientific Management." Harper & Brothers, 1911.

Explains the well-known Taylor system of management, together with a history of its development.

TAYLOR, FREDERICK WINSLOW. "The Principles of Scientific Management." *American Magazine*, May, 1911, pp. 570-581.

A brief and somewhat popular account of Mr. Taylor's methods. An excellent article for the non-technical student.

THOMPSON, CLARENCE B. (Ed.) "Scientific Management." Harvard University Press, 1914.

A book for the student of shop management, written by many experienced operators.

—— "Relation of Scientific Management to Labor." *Quarterly Journal of Economics*, Vol. XXX, Feb., 1916, pp. 311-351.

An explanation and defense of the Taylor system as it touches wages and labor organizations. The attitude of certain labor leaders is criticized, though it is admitted that "positive Management" has "the necessity of retaining the good will of the employees."

TOLMAN, WILLIAM H. "Social Engineering." New York: McGraw Publishing Company, 1909.

An exhaustive account of the various efforts to improve social conditions among employees. A very valuable book for all workers. Treats of efficiency in promotion, safety, hygiene, education, recreation, and other topics of vital interest to employees.

VALENTINE, ROBERT G. "The Progressive Relation Between Efficiency and Consent." *Society to Promote the Science of Management, Bulletin*, Vol. I, No. 6, Nov., 1915, pp. 26-30.

A plea for scientific management to go back to the pure Taylor policy of relating its methods to the wishes of the workers. A forceful statement, to managers and manufacturers, of the social and political implications of scientific management.

This author was associated with Hoxie in his work, and is author of "Industrial Problems," Chapter X, in Philip Davis's "Field of Social Service." (Small, Maynard & Co., 1915.)

WARREN, B. S., and SYDENSTRICKER, EDGAR. "Health Insurance: Its Relation to the Public Health." *Public Health Bulletin No. 76*, Mar., 1916, U. S. Treasury Department.

A strong indictment of economic and industrial conditions that foster sickness and disease. The argument for the abolition of poverty is stronger than that for health insurance.

WILLIAMS, JOHN M. "An Actual Account of What We Have Done to Reduce Our Labor Turn-Over," 1917, 14 pp. Reprinted in *The Annals*, May, 1917.

The Secretary for Fayette R. Plumb (Inc.) of Philadelphia and New York outlines in this address the methods of the corporation's newly established Employment Department. Sample forms, data as to the results attained after the first few months of operation, and a brief discussion of the cost of changing employees are among the noteworthy features of this valuable paper.

WILLITS, JOSEPH H. "The Labor Turnover and the Humanizing of Industry." *American Academy of Political and Social Science, Annals*, Sept., 1915, Publication No. 929.

A good statement of the aims and methods of the employment-manager movement.

— "The Unemployed in Philadelphia." Department of Public Works, Philadelphia, 1915. Also in Supplement to *The Annals*, May, 1916.

A scientific study of the fluctuation of employment in some of the city's leading industries, the effects of unemployment on the city and the individual, and the possible remedies. A public employment bureau is suggested. Pages 86-88 discuss the present abuses in hiring men. The book



contains diagrams and tables. It lacks a good table of contents.

This report reprints "The Functionalized Employment Department" by Earnest M. Hopkins, a scholarly article on the work of the employment manager (pp. 162-168).

WOOD, ARTHUR EVANS. "A Study of the Unemployed." *Reed College Record*, No. 18, Dec., 1914.

This report is based on an intensive study of about 500 unemployed men in Portland, Oregon. It is found that conditions in industry make unemployment inevitable and that on the whole it cannot be said that a man's unemployment is his own fault. Detailed facts and figures are given.

WOOD, JUNIUS B. "The Negro in Chicago." Reprinted from the *Chicago Daily News*, 1916, 31 pp.

An account of an investigation of the social problems of the negro population of Chicago. The study includes the following subjects among others: wages, labor conditions, housing, vice, education, handicaps and opportunities peculiar to the colored race, and the part taken by them in business, politics and the professions. The high wage standard set by Chicago has attracted so many negroes to the city that the colored population is now said to be about 75 000 or about 3 per cent of the total population. The Pullman Co., and the stockyards are among the largest single employers of colored labor in the United States.

WORLD'S WORK MAGAZINE. "Corporation Schools." *The World's Work*, Vol. XXXI, No. 4, Feb., 1916, pp. 417-420.

A brief attractive statement of the methods used by some of the big corporations to teach their men.



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